E
00
5
.192-203
dex
/C

204

UNIVERSITY OF ILLINOIS
LIBRARY
APR 16 1964
CHICAGO

1963

GEOPHYSICAL ABSTRACTS

INDEX

Numbers
192-203

March 3, 1849

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

QE
500
U5
no. 192-203
Index
NIC

GEOPHYSICAL ABSTRACTS

963 Index to numbers 192–203

By JAMES W. CLARKE, DOROTHY B. VITALIANO, VIRGINIA S. NEUSCHEL, *and others*

U.S.

GEOLOGICAL SURVEY

U.S. DEPARTMENT OF THE INTERIOR
March 3, 1849

Abstracts of current literature
pertaining to the physics of
he solid earth and to
geophysical exploration

NITED STATES GOVERNMENT PRINTING OFFICE, WASHINGTON : 1964

UNITED STATES DEPARTMENT OF THE INTERIOR

STEWART L. UDALL, *Secretary*

GEOLOGICAL SURVEY

Thomas B. Nolan, *Director*

For sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D. C. 20402 Price 35 cents (single copy), index 75 cents. Subscription price: $4.25 a year (12 monthly issues and index); $1.00 additional for foreign mailing. Use of funds for printing this publication approved by the Director of the Bureau of the Budget (March 14, 1962).

INDEX TO GEOPHYSICAL ABSTRACTS 192-203, 1963

By James W. Clarke and others

1127-15

AUTHOR INDEX

A

Abstract

bbruzzese, Domenico. The active volcanism of Santorin --------- 202-340

bdullayev, R. A. Pinch-out of the productive unit within the Nizhne-Kura region according to data of seismic surveying-------- 195-324

bel'skiy, M. Ye. Some improvements in the GAK-ZM gravimeter -- 199-170

bramovici, F. See Pekeris, C. L

brams, I. J. See Sonett, C. P

bubakar, Iya. Buried compressional line source in a halfspace with an irregular boundary------------------------------------ 196-146

— Motion of the surface of a transversely isotropic halfspace excited by a buried line source ------------------------------------ 196-145

— Reflection and refraction of plane SH waves at irregular interfaces. I -- 196-147

— Reflection and refraction of plane SH waves at irregular interfaces. II --- 196-148

— Scattering of plane elastic waves at rough surfaces. II--------- 197-116

dachi, Ryuzo. The motion of the pendulum of a transducer forced to move two dimensionally ---------------------------------- 192-335

dám, Antal. On earth current model experiments -------------- 192-45

— Telluric model -- 198-50

dám, Antal, Erkel, András, and Szabadvary, László. New Hungarian geoelectrical instruments ----------------------------- 196-185

dám, Antal, and Verő, Jósef. Preliminary report on regional telluric observations of the Geophysical Research Laboratory of the Hungarian Academy of Sciences -------------------------- 198-51

dam, N. V., and Orlov, V. P. Annual variations of H, D, and Z and determination of the mean annual values of the magnetic elements on the basis of single-month observations in the high latitudes --- 200-255

— Annual variations of the magnetic field in the U. S. S. R. during the period 1948-1959 -------------------------------------- 200-254

damcik, J. A. The water vapor content of the Martian atmosphere as a problem of chemical equilibrium ------------------------ 202-50

dams, J. A. S. See Pliler, R.

dams, R. D. Source characteristics of some deep New Zealand earthquakes --- 202-62

dams, W. M. Reply by author to discussion by Carl Kisslinger--- 200-123

de-Hall, J., and Wilson, R. L. Petrology and the natural remanance of the Mull lavas -- 200-275

divarahan, P., Kunii, D., and Smith, J. M. Heat transfer in porous rocks through which single-phase fluids are flowing------ 193-235

dler, Gerhard, and Horst, Wolfgang. Geologic-geoelectric mapping for the Wendefurth pump storage basin, Harz ------------ 192-143

dler, Lawrence. Engineering analysis of geologic pressures and design effects -- 196-341

fanas'yev, G. D. Again on the structure of the crust according to geophysical data from the standpoint of petrography ---- 197-220, 202-183

Abstract

Afanas'yev, G. D. On some geological results and tasks of research on the problem of determining the absolute age of geological formations ---------- 200-2

Afanas'yev, G. D., Borisevich, I. V., Shanin, L. L., and Sheina, I. P. Cases of unbalanced K-Ar relationships in biotites in connection with the construction of a geochronologic scale in an absolute time-table ---------- 197-3

See also Shcherbakov, D. I.

Afanas'yev, M. N. Experience in the use of kappametry in geologic mapping ---------- 197-272

Afanas'yeva, V. I. Short-period oscillations of the magnetic field of the Earth ---------- 194-247

—— The corpuscular nature of day-to-day variability of quiet solar diurnal geomagnetic variations ---------- 200-267

—— The energy characteristics of geomagnetic activity ---------- 203-252

Affleck, James. Magnetic anomaly trend and spacing patterns ---------- 201-297

Afonina, R. G. Geomagnetic manifestations of the asymmetry between the Sun's hemispheres ---------- 198-245

—— Problem of the difference between magnetic storms of sudden and gradual commencement ---------- 195-273

—— Review of geomagnetic activity in 1952-1959 and some differences between sudden-commencement and gradual-commencement magnetic storms ---------- 198-246

Agamirov, S. Sh. Geochemical balance of radioactive elements in the Black Sea basin ---------- 202-258

Agard, J., and Grau, G. Statistical study of seismograms ---------- 196-332

Agnew, A. F., and Tullis, E. L. Pierre earthquake of 1961 ---------- 195-47

Agocs, W. B. Aerial natural resources evaluation procedures and costs ---------- 192-162

—— Interpretation of aeromagnetic profile from Bangkok to Singapore ---------- 192-309

Agocs, W. B., and Terry, S. A. Geophysical evaluation of aeromagnetic profile, Trinidad to Surinam ---------- 200-295

—— Southern Italy's igneous structure from aeromagnetic profiles ---------- 197-297

Agrell, S. O., Long, J. V. P., and Ogilvie, R. E. Nickel content of kamacite near the interface with taenite in iron meteorites ---------- 201-27

Agron, S. L. Anomalous magnetization in sandstone near Newport, Rhode Island ---------- 196-285

Ahluwalia, H. S. Semidiurnal variation of cosmic rays on geomagnetically disturbed days ---------- 193-274

Ahmad, F. Palaeogeography of the Gondwana period in Gondwanaland, with special reference to India and Australia, and its bearing on the theory of continental drift ---------- 195-147

Ahrens, L. H. Possible Zr-Hf fraction between earth and meteorites ---------- 195-18

Ahrens, T. J., and Katz, Samuel. Ultrasonic observation of the calcite-aragonite transition ---------- 195-92

See also Woeber, A. F.

Airinei, Ştefan. Geophysical contributions to knowledge of the substratum of the Trestiorara basin (Region of Ploieşti) ---------- 201-209

—— Gravity and magnetic investigations in the hilly and mountainous zone of eastern Muntenia (Edera-Bezdead Talea-Şotrile-Meliceşti-Buştenari-Mislea-Măgureni) ---------- 199-176

—— Gravity and magnetic investigations in the hilly and mountainous zone of eastern Muntenia (Mislea-Buştenari-Şotrile-Teşila-Petriceaua-Cosminele-Vîlcăneşti) ---------- 199-177

Airinei, Ştefan, and Murgeanu, G. Geophysical study of the structure of the basement of the bend of the Eastern Carpathians ---------- 192-231

Akademiya Nauk Uzbek SSR. Fedchenko Glacier ---------- 202-146

Abstract

Akasofu, Syun-Ichi. Deformation of magnetic shells during magnetic storms 202-219

—— Large-scale auroral motions and polar magnetic disturbances-II. The changing distribution of the aurora during large magnetic storms 193-276

Akasofu, Syun-Ichi, and Chapman, Sydney. Large-scale auroral motions and polar magnetic disturbances-III. The aurora and magnetic storm of 11 February 1958 193-285

—— Magnetic storms: the simultaneous development of the main phase (DR) and of polar magnetic substorms (DP) 200-269

—— The development of the main phase of magnetic storms 194-261

—— The enhancement of the equatorial electrojet during polar magnetic substorms 199-233

—— The lower limit of latitude (US sector) of the northern quiet auroral arcs, and its relation to Dst(H) 197-240

Akasofu, Syun-Ichi, Chapman, Sydney, and Venkatesan, D. The main phase of great magnetic storms 200-271

Akasofu, Syun-Ichi, and Lin, W. C. The magnetic moment of model ring current belts and the cutoff rigidity of solar protons 196-277

Akchas'yanov, Yu. A. See Zhuvagin, I. G.

Akhmedov, G. A. See Ali-Zade, A. A.

Akhmetzhanov, Kh. S. See Zommer, I. E.

Aki, Keiiti. A note on crustal structure 196-256

—— Accuracy of the Rayleigh wave method for studying the earthquake mechanism 193-83

—— Quantitative prediction of earthquake frequency as random values 203-75

—— Study of earthquake waves by a seismometer array. Pt. 1. Aftershocks of the Kitamino earthquake of Aug. 19, 1961 195-54

Aki, Keiiti, and Matumoto, Hideteru. Study of earthquake waves by means of a seismometer array. Pt. 2. A study of the crustal structure in the Kanto region by the observation of apparent velocities of P waves caused by many small earthquakes 203-104

See also Kaminuma, Katsutada, and Miyamura, Setumi.

Akimoto, Syun-Iti. Magnetic properties of $FeO-Fe_2O_3-TiO_2$ system as a basis of rock magnetism 197-262

Akimoto, Syun-Iti. See Syono, Yasuhiko.

Akutsu, Juichi, and Kanno, Kiyoshi. Improved end window G. M. counter using an inner metal disk 200-310

Albee, A. L. See Taylor, H. P.

Alberda, J. E., Krijger, B. G. K., and Meerdink, E. F. The adjustment of the UELN as executed at Delft 194-182

Aldrich, L. T., Hart, S. R., Hayase, Ichikazu, Davis, G. L., Tilton, G. R., Doe, B. R., and Baadsgaard, Halfdan. Radioactive ages of rocks 197-17

See also Steinhart, J. S., and Tilton, G. R.

Aleksandrov, B. Z. Structure and dynamics of magnetic variations in the Arctic and sub-Arctic 199-250

Aleksandrov, K. S. See Ryzhova, T. V.

Aleksandruk, V. M. See Starik, I. Ye.

Alekseyev, A. P. See Skripchenko, N. S.

Alekseyev, A. S. On the kinematic and dynamic properties of the principal deep waves in the case of some theoretical crustal models 194-100

—— Some reverse problems of the theory of propagation of waves. Pt. 1 196-159

—— Some reverse problems of the theory of propagation of waves. Pt. 2 196-160

Alekseyev, El., and Ivanov, Iv. On the absolute geologic age of pegmatites of the Smilovene deposit of the Koprivshtitsa region 201-16

Alekseyev, F. A., Gottikh, R. P., and Sundukova, G. D. Results of radiogeochemical investigations of the Kyurov-Dag oilfield 199-286

Abstract

Alekseyeva, K. N. See Burkser, Ye. S.

Alexander, W. M. See Dubin, Maurice, LaGow, H. E., and McCracken, C. W.

Aleynikov, A. L., and Kuznetsov, A. A. Solution of the inverse problem in the case of a gravitational step ---- 201-199

Alfano, Luigi. Apparent electrical resistivity in the presence of curved discontinuities ---- 196-179

—— Geoelectrical prospecting with underground electrodes ---- 196-175

Alferov, B. A. Research drill holes of the USSR Aleksandriyskaya research drill hole (North Caucasus) ---- 194-164

Alfvén, Hannes. On the early history of the Sun and the formation of the solar system ---- 201-23

—— On the mass distribution in the solar system ---- 196-31

—— The early history of the Moon and the Earth ---- 197-55

Alfvén, Hannes, and Klein, O. Matter-antimatter annihilation and cosmology ---- 197-34

Alfvén, Hannes, and Wilcox, J. M. On the origin of the satellites and the planets ---- 197-32

Algermissen, S. T. See Cook, K. L.

Aliyev, V. I. See Kashkay, M. A.

Ali-Zade, A. A., Akhmedov, G. A., Kulikov, V. I., Tereshko, D. L., and Shapirovskiy, N. I. Problem of locating extra deep boreholes for study of crustal structure in Azerbaijan ---- 200-235

Allan, T. D., Dehlinger, Peter, Gantar, C., Morelli, Carlo, and Pisani, M. Comparison of Graf-Askania and LaCoste-Romberg surface-ship gravity meters ---- 194-213

Alldredge, L. R., Van Voorhis, G. D., and Davis, T. M. A magnetic profile around the world ---- 201-302

Allen, B. W. See Hoadley, F. C.

Allen, C. R. Circum-Pacific faulting in the Philippines-Taiwan region ---- 193-181

Allenby, R. J., Jr. The importance of reflected refractions in seismic interpreting ---- 196-329

Allingham, J. W., and Zietz, Isidore. Geophysical data on the Climax stock, Nevada test site, Nye County, Nevada ---- 195-297

Allsopp, H. L., Roberts, H. R., Schreiner, G. D. L., and Hunter, D. R. Rb-Sr age measurements on various Swaziland granites -- 196-13

Al'mukhanbetov, D., and Urazayev, B. M. Possibilities of the use of electrical surveying methods in prospecting investigations in the Dzhezkazgan region ---- 197-148

Al'perovich, L. V. Some results of studies of short-period pulsations of the Earth's electromagnetic field at the time of auroras - 200-266

Al'pin, L. M. Preliminary calculations for the theory of collar logging ---- 203-157

—— Use of grid modeling for the solution of problems of the theory of electrical logging ---- 201-141

Alsop, L. E. Free spheriodal vibrations of the Earth at very long periods, Pt. I -- Calculation of periods for several earth models ---- 198-75

—— Free spheroidal vibrations of the Earth at very long periods, Pt. II -- Effect of rigidity of the inner core ---- 198-76

Alterman, Z. See Pekeris, C. L.

Amazeen, P. G. See Cahill, L. J.

Ambraseys, N. N. Data for the investigation of the seismic seawaves in the Eastern Mediterranean ---- 193-88

—— Seismic seawave in the Gulf of Corinth ---- 203-94

—— The Buyin-Zara (Iran) earthquake of September, 1962, a field report ---- 203-68

Amirkhanov, Kh. I., Brandt, S. B., Bartnitskiy, Ye. N., Voronovskiy, S. N., and Zar'yanov, V. I. Problems of strict foundations for geochronometry ---- 199-7

Abstract

Amiruddin, A., and Ehmann, W. D. Tungsten abundances in meteoritic and terrestrial materials --- 194-36

Amshinskiy, N. N. Zonality of gamma fields and of accessaory minerals in granite masses of the Altay --- 197-308

Anandalwar, M. A. See Rao, M. B. R.

Ananyan, A. A., and Dobrovol'skiy, V. P. On the electrical conductivity of permafrost --- 194-168

Ancarani, L., and Bettinali, C. Isotopic analysis of the uranium and sulfur in the study of the mineralization of Canale Monetrano- 201-238

Ancarani-Rossiello, L., Bettinali, C., and Faina, G. On the isotopic composition of the sulfur in the pyrite of the Maremma Toscana and of the Island of Elba --- 201-239

Andel, Tj. H. van. Subsurface echo sounding --- 203-330

Anders, Edward. Comments on the origin of natural diamonds --- 193-26

—— Two meteorites of unusually short cosmic-ray exposure age --- 196-43

Anders, Edward, and Fitch, F. W. Search for organized elements in carbonaceous chondrites --- 195-20

See also DuFresne, E. R., Goles, G. G., and Viste, Elizabeth.

Andersen, F. See Whitham, Kenneth.

Anderson, D. L. Elastic properties of sea ice from dynamic measurements --- 193-119

—— Use of long-period surface waves for determination of elastic and petrological properties of ice masses --- 201-112

Anderson, D. L., and Toksöz, M. N. Surface waves on a spherical Earth. 1. Upper mantle structure from Love waves --- 200-108

See also Kovach, R. L., and Toksöz, M. N.

Anderson, E. T. See White, D. E.

Anderson, G. M. See Keith, M. L.

Anderson, L. A., Bromery, R. W., and McGowan, E. F. Aeromagnetic map of the Millinocket Lake quadrangle, Aroostook, Piscataquis, and Penobscot Counties, Maine --- 202-232

Anderson, L. A., Bromery, R. W., and Tyson, N. S. Aeromagnetic map of the Spider Lake quadrangle and part of Musquacook Lakes quadrangle, Piscataquis and Aroostook Counties, Maine --- 197-275

Anderson, L. A., Hawkins, Daniel, and others. Aeromagnetic map of parts of Wilkin, Otter Tail, Grant, and Traverse Counties, Minnesota --- 200-292

Anderson, L. A., and Natof, N. W., and others. Aeromagnetic maps of Maine --- 200-289, 201-303

Anderson, L. A., Petrafeso, F. A., and others. Aeromagnetic map of parts of Clay, Wilkins, and Otter Tail Counties, Minnesota --- 197-288

Anderson, L. A., Tyson, N. S., and others. Aeromagnetic map of the northwestern part of Cook County, Minnesota --- 201-304

Anderson, L. A., Zandle, G. L., and others. Aeromagnetic map of Norman and part of Manhomen Counties, Minnesota --- 203-288

—— Aeromagnetic map of parts of Clay and Becker Counties, Minnesota --- 200-291

Anderson, W. L., and Walker, Terry. Research predicts improved cement bond evaluations with acoustic logs --- 193-332

André, K. See Jacobi, W.

Andreasen, G. E., Chandler, E. J., and others. Aeromagnetic map of the High Bridge quadrangle, Warren and Hunterdon Counties, N. J --- 199-261

—— Aeromagnetic map of the Washington quadrangle and part of the Blairstown quadrangle, Warren, Hunterdon, and Morris Counties, N. J --- 197-283

Andreasen, G. E., Dempsey, W. J., Vargo, J. L., and others. Aeromagnetic maps of Alaska --- 197-295

Abstract

Andreasen, G. E., Henderson, J. R., Jr., Chandler, E. J., and others. Aeromagnetic map of parts of the Tranquility and Stanhope quadrangles, Warren, Sussex, and Morris Counties, New Jersey ---------- 197-282

—— Aeromagnetic maps of New Jersey ---------- 199-262

Andreasen, G. E., and Petrafeso, F. A. Aeromagnetic map of the east-central part of the Death Valley National Monument, Inyo County, California ---------- 202-249

—— Aeromagnetic maps of Texas ---------- 202-241

Andreasen, G. E., Smith, F. C., and others. Aeromagnetic maps of New York ---------- 203-283

Andreasen, G. E., Vargo, J. L., and others. Aeromagnetic maps of New York ---------- 203-285

Andreasen, G. E., and Zandle, G. L. Aeromagnetic map of the Northfield quadrangle, Franklin County, Massachusetts, Windham County, Vermont, and Cheshire County, New Hampshire --- 203-281

Andreasen, G. E., and Zietz, Isidore. Limiting parameters in the magnetic interpretation of a geologic structure ---------- 194-282

See also Grantz, Arthur, and Popenoe, Peter.

Andrei, Justin. See Botezatu, Radu.

Andreyev, B. A. Geophysical and geological features of the zone of deep-focus earthquakes of the northwest part of the Pacific Ocean ---------- 202-57

—— On a paper of M. Ye. Artem'yev "Approximate calculation of the isostatic adjustment and the isostatic state of Antarctica" ---- 202-150

—— On the observations of Ye. N. Lyustikh on my paper "Faye gravity anomalies and isostasy" ---------- 199-158

Andreyev, B. A., and Klushin, I. G. Geological interpretation of gravity anomalies ---------- 202-151

Andreyev, L. I. See Sarkisov, G. A.

Andreyev, V. I. Determination of the direction of the vector of remanent magnetization using textural features of the magnetite ores of the Tashtagol deposit ---------- 200-277

Andreyeva, R. I. On the tracing of fault dislocations according to the results of combined analysis of geophysical and drilling data - 195-317

Andreyeva, R. I., Gavrish, V. K., and Chirvinskaya, M. V. Experience in coordinated analysis of seismic and drilling data in the complex block uplifts of the Dnieper-Donets depression ------ 197-342

Andrew, E. M. See Masson Smith, D.

Angenheister, Gustav. Some elucidations on the study of the technical literature on rock magnetism ---------- 192-288

Anger, Gerh., and Borchert, H. The significance of the sulfur isotopes for the evaluation of economic geologic and genetic problems ---------- 198-214

Angino, E. E., Turner, M. D., and Zeller, E. J. Reconnaissance geology of Lower Taylor Valley, Victoria Land, Antarctica ----- 196-29

Anishchenko, G. N. Seasonal variations of the upper part of permafrost ---------- 195-112

Anishchenko, G. N., Golubkov, V. V., Nikitenko, K. I., and Chernyavskiy, G. A. Magnetotelluric sounding in central Turkmenia ---------- 199-50

Anishchenko, G. N., and Shal'nov, B. V. Field of a point source of current on the surface of horizontally layered anisotropic sections with horizontal and vertical bedding of the anisotropic medium ---------- 200-127

Anpilogov, A. P. Problem of estimating the residual oil saturation of flooded strata ---------- 195-115

Anpilogov, A. P., Galyavich, A. Sh., and Masyukova, L. G. Effect of various factors on SP diagrams ---------- 196-191

Abstract

Anstey, N. A. On problems connected with synthetic seismograms - 202-282

Antal, P. See Rosholt, J. N.

Antoine, J., and Ewing, J. I. Seismic refraction measurements on the margins of the Gulf of Mexico ---------- 198-331

Antonenko, A. N. On the relationship of the gravitational field to the deep crustal structure in central and northern Kazakhstan ------- 200-219

Antonenko, E. M. Some experimental data in the study of high frequency microseisms ---------- 197-304

Antsilevich, M. G. Geomagnetic field variations on August 9, 10, 24, 25 and September 1, 2, 1959, and March 11, 1960 ---------- 198-236

Antsyferov, M. S. The electroseismic effect ---------- 195-314

Antweiler, J. C. See Cannon, R. S.

Aoki, K. See Yagi, Kenzo.

Aparin, V. P. See Vlasov, A. Ya.

Apel, J. R., Singer, S. F., and Wentworth, R. C. Effects of trapped particles on the geomagnetic field ---------- 199-231

Arabadzhi, M. S., Vasil'yev, Yu. M., and Mil'nichuk, V. S. Seismic errors in the central and western regions of the Peri-Caspian depression ---------- 201-349

Aramaki, Shigeo, and Yamasaki, Masao. Pyroclastic flows in Japan ---------- 203-348

Araschmid, A. On the grouping of geophones in seismic refraction surveying ---------- 192-331

Aravamathu, P. S. Magnetic survey north of Waltair ---------- 202-250

Ardasenov, I. A. See Karmanov, B. V.

Aref'yev, N. V. See Grinberg, I. V.

Arest, V. I. On the definition of scales and accuracy of gravimetric surveys ---------- 194-210

Arias S., Arturo, and Husid L., Raul. Discussion of "Earthquake analysis by response spectrum superposition" by R. W. Clough -- 198-73

Arkhangel'skaya, V. M. Conference on study of surface waves ---- 192-242

—— Session of the Council on Seismology of the Academy of Science of the U. S. S. R. at Dushambe ---------- 201-84

Armstrong, F. C. See Mabey, D. R.

Arnold, J. R., Honda, Masatake, and Lal, Devendra. Record of cosmic-ray intensity in the meteorites ---------- 197-39

See also Honda, Masatake.

Arnold, Kurt. Gravimetric deflections of the vertical in high mountains determined by free-air anomalies ---------- 192-199

—— Recent achievements in the theory of the level-surfaces of the Earth ---------- 192-169

—— The deflections of the vertical expressed in free-air anomalies and their relationship to the gravimetric-isostatic deflections --- 192-201

—— The European datum ---------- 192-184

Arnold, R. G., Coleman, R. G., and Fryklund, V. C. Temperature of crystallization of pyrrhotite and sphalerite from the Highland-Surprise Mine, Coeur d'Alene district, Idaho ---------- 196-253

Arogyaswamy, R. N. P. The Lonar Lake ---------- 194-56

Aronovich, Z. I. Determination of the energy of Crimean earthquakes ---------- 202-60

Arslanov, Kh. A. See Starik, I. Ye.

Artamonov, L. V., and Katskov, A. I. Application of geophysical methods in geological surveying and exploration in Sweden ------ 192-151

Artamonov, L. V., and Rivosh, L. A. Experience of combined use of aeroelectric and aeromagnetic surveys under the geological conditions of the Baltic crystalline shield ---------- 194-141

Artemov, V. R., and Volochayev, V. Ya. On the procedure for prospecting and exploration of deposits of alkali amphibole-asbestos ---------- 200-135

Artemov, Yu. M. Absolute age of some rocks from the southern part of the Tarak massif of the Yenesei Range ---------- 198-18

Abstract

Artem'yev, M. Ye. Approximate calculation of the isostatic adjustment and the isostatic state of Antarctica ---------- 202-149
—— Gravity anomalies and seismicity of Western Europe and the Mediterranean Sea ---------- 201-188
—— Some regularities of distribution of isostatic anomalies in the areas of Alpine folded structures of western Europe ---------- 194-215
Artesian Basin Oil Company Proprietary Limited. Muttaburra seismic survey, Queensland, 1959 ---------- 192-342
Artsybashev, V. A. On a procedure for determining the volumetric weight of ores from the attenuation of gamma rays ---------- 202-264
Asada, Toshi, and Suzuki, Ziro. On observations of weak earthquakes after the Imaichi earthquake of December 26, 1949 ---------- 203-83
See also Matuzawa, Takeo, Rodriguez B., A., and Steinhart, J. S.
Asano, Shuzo. Reflection and refraction of elastic waves at a corrugated boundary surface. Pt. 2 ---------- 195-86
Ashley, J. A magnetic survey of north-east Trinity Peninsula, Graham Land. I. Tabarin Peninsula and Duse Bay ---------- 199-274
Aslanyan, A. T. Some problems of the theory of volcanic activity ---------- 202-343
—— The relativistic theory of the origin of the magnetic field of the earth and the contraction mechanism ---------- 198-216
Associated Australian Oilfields N. L. Arcadia anticline seismic survey, Queensland, 1959 ---------- 192-343
—— East Roma seismic survey, Queensland, 1959-1960 ---------- 202-289
—— South Roma seismic survey, Queensland, 1959 ---------- 192-344
Assur, Andrew. Composition of sea ice and its tensile strength ---------- 192-351
See also Weeks, W. F.
Astier, J. L. See Denozière, P.
Astrakhantsev, G. V. On the nature and distribution of earth currents of industrial frequency in the Central Urals ---------- 201-65
—— Relationship between specific conductive capacitance and the polarization capacity of rocks ---------- 200-148
Astrakhantsev, G. V., Katin-Yartsev, M. L., and Titlinov, V. S. Test of operations by the method of frequency sounding at the Techensk iron ore deposit ---------- 201-135
Aswathanarayana, U. See Gangadharam, E. V., and Mahadevan, C.
Athavale, R. N., Radhakrishnumurty, C., and Sahasrabudhe, P. W. Palaeomagnetism of some Indian rocks ---------- 199-245
Atrashenok, L. Ya. See Krylov, A. Ya.
Attewell, P. B. Response of rocks to high velocity impact ---------- 200-348
Aubert, Maurice, Clerc, Gerard, and Gilbert, Daniel. Portable apparatus for the recording of very slow telluric variations ---------- 194-67
Australian Bureau of Mineral Resources. Radiometric surveys using light aircraft ---------- 192-316
Auzin, A. K. Integrated geophysical investigations in prospecting for nickel silicate ores ---------- 194-289
—— Test of the use of the self-potential method on the vein-disseminated copper-molybdenum deposits of central Kazakhstan ---------- 197-142
Auzin, A. K., and Logvinets, M. N. Observations of the natural electrical field potential with simultaneous watering of the holes for grounding ---------- 194-134
Avdulov, M. V. On the geologic nature of the Elbrus gravity anomaly ---------- 194-216
Averko, Ye. M. Experimental determination of the head wave. Frequency analyzer ---------- 194-111
—— Method of nonstationary graduation of a piesotransformer for purposes of seismic modeling ---------- 194-112
—— On the problem of grapho-analytical analysis and synthesis of seismic vibrations ---------- 193-331
Aver'yanov, A. G. On the appearance of refracted waves in deep seismic sounding in the northwest part of the Okhotsk Sea ---------- 194-316

Abstract

ver'yanov, A. G., Gal'perin, Ye. I., Kosminskaya, I. P., Krakshina, R. M., Mikhota, G. G., Tulina, Yu. V., Veytsman, P.S., Zayonchkovskiy, M. A., and Zverev, S. M. Deep seismic sounding carried out during the IGY in the zone of transition from the Asiatic continent to the Pacific Ocean ---- 198-202

ver'yanov, A. G., Veytsman, P. S., Gal'perin, Ye. I., Zverev, S. M., Kosminskaya, I. P., Krakshina, R. M., Mironova, V. I., Mikhota, G. G., and Tulina, Yu. V. Fundamental characteristics of the deep waves recorded in deep seismic sounding operations in the transition zone from the Asiatic continent to the Pacific Ocean ---- 194-350

See also Ivakin, B. I.

ver'yanova, V. N. Comparison of experimental data obtained for three Kamchatka earthquakes with existing power models of a focus ---- 196-119

vzyanov, V. S. See Barsukov, O. A.

xelrod, D. I. Fossil floras suggest stable, not drifting, continents ---- 200-190

xford, W. I., and Hines, C. O. A unifying theory of high-latitude geophysical phenomena and geomagnetic storms ---- 192-282

xford, W. I., and Reid, G. C. Increases in intensity of solar cosmic rays before sudden commencements of geomagnetic storms ---- 198-241

ynard, C. Towards a rationalization of the use of gravity surveying ---- 194-212

yvazyan, S. A. See Mustel', E. R.

zamatov, V. I. See Dement'yev, L. F.

zhgirey, G. D. On methods of studying the form and genesis of large-scale tectonic structures ---- 196-217

—— Some characteristic features of the tectonics and evolutionary history of global mobile belts. Pt. 1. Deep fractures ---- 192-186

zizbekov, Sh. A. Stages of evolution of volcanism in mobile zones (exemplified by the Nakhichevan folded zone of the Caucasus) ---- 202-124

B

aadsgaard, Halfdan. See Aldrich, L. T., Burwash, R. A., Godfrey, J. D., and Williams, G. D.

aag, C. G., and Kim, K. S. The detailed report of magnetic prospecting and S. P. measurement at Hwan Sun nickel mine ---- 200-300

aba, Kenzo, and Suyama, Junji. On the result of electrical prospecting by profiling method near Yotsugi mine at Ningyo Pass ---- 192-138

abak, V. I. Method of constructing paleotectonic maps for studying the history of recent tectonic movements (exemplified by the Crimea) ---- 195-155

abayants, S. P., and Zavarzin, G. N. Prospecting for Mesozoic bauxites of Kazakhstan employing geophysical methods ---- 195-124

aba-Zade, B. K. Procedure of geologic exploratory operations for oil and gas in the Azerbaijan SSR ---- 200-160

abecki, Jan. Lead-alpha method of determining absolute age of volcanic rocks ---- 201-5

achan, Wiesław. Application of geophysical methods in the investigation of veins of nonferrous metal ores in Poland ---- 201-151

acioiu, Traian. See Botezatu, Radu.

ackus, G. E. Long-wave elastic anisotropy produced by horizontal layering ---- 193-105

—— The propagation of short elastic surface waves on a slowly rotating Earth ---- 192-110

ackus, M. M. See Gilbert, Freeman.

Abstract
Baden-Powell, D. F. W. Isostatic recovery in Scotland ---------- 203-178
Bader, Henri. The Greenland Ice Sheet ---------- 194-197
Bader, Michel. Preliminary Explorer 12 data on protons below 20 Kev ---------- 194-242
Badgley, P. C. Analysis of structural patterns in bedrock ---------- 197-178
Bad'yanov, V. A. See Dement'yev, L. F.
Bagdasarova, A. M., Islamov, K. Sh., Koridalin, Ye. A., Kuznetsov, V. P., Kuz'mina, N. V., Nenilina, V. S., Nersesov, I. L., Sultanova, Z. Z., and Kharin, D. A. Seismicity of the east part of the south foothills of the main Caucasus Range and some methodological problems of study of the seismicity of individual regions. Pt. 2 ---------- 199-61
Bagdasarova, A. M., and Kuz'mina, N. V. Seismicity of the Garm zone ---------- 192-71
Bagdasarova, A. M., Kuz'mina, N. V., and Nenilina, V. S. Seismicity of the Shemakha zone ---------- 192-66
Bagge, E., and Willkomm, H. Geologic age determination with Cl-36 ---------- 201-6
Baggio, Paolo, and Malaroda, Roberto. The Mont Blanc tunnel; first geologic observations on the cut from 2,500 to 3,700 m from the Italian end ---------- 200-227
Bagin, V. I. Possibilities of developing an alternating field method for determining the ferromagnetic composition of rocks ---------- 199-234
Baglietto, E. E., and Coron, Suzanne. Buenos Aires (Ezeiza)-Madrid (Barajas) international gravity ties ---------- 192-224
Bagrintseva, K. I. Study of core of fractured carbonate rocks by ultrasonic and luminescent defectoscopes ---------- 201-167
Bailey, S. W., Hurley, P. M., Fairbairn, H. W., and Pinson, W. H., Jr. K-Ar dating of sedimentary illite polytypes ---------- 194-5
Bainbridge, A. E. Tritium in the North Pacific water ---------- 202-193
Bakar, V. A., and Lebedev, A. P. The vulcanism of the Siberian trap formations and tectonics ---------- 202-350
Baker, C. D. See Berg, J. W., Jr.
Baker, C. H., Jr. See McKee, E. D.
Baker, George. Australite buttons ---------- 198-33
—— The present state of knowledge of the "age-on-earth" and the "age-of-formation" of Australites ---------- 199-39
Baker, M. J. See Callow, W. J.
Bakhryshin, A. B. See Ostrovskiy, A. Ye.
Baklanov, N. I. See Pelyushenko, V. M.
Balabushevich, I. A. On some principles of construction of gradient-meters and gravity-sensitive elements for surveys in motion ---------- 193-215
—— On some problems of the dynamics of the Earth's crust in the light of the contraction and expansion hypotheses ---------- 199-141
Balakina, L. M. Overall regularities in the directions of the principal stresses acting at the focuses of earthquakes of the Pacific Ocean seismic belt ---------- 197-84
Balakina, L. M., Shirokova, Ye. I., and Vvedenskaya, A. V. Double refraction in aelotropic-layers and some peculiarities of low velocity layer in Earth's mantle ---------- 193-254
Balakina, L. M., and Vvedenskaya, A. V. Measurement of the elastic properties and density of the material at the boundary of the Earth's core ---------- 195-223
Balakrishna, S. Geological and geophysical investigations on Deccan traps ---------- 203-139
—— Gravity-time curve and seismic disturbances ---------- 196-228
—— Nuclear explosions and normal mode oscillations of the Earth ---------- 193-120
—— Recent nuclear explosions and earth tides ---------- 194-92, 197-107

Abstract

alakrishna, S., Christopher, G., and Raghava, M. S. Magnetic anomalies in granites of Hyderabad ---------- 195-304

alakrishna, S., and Johnson, P. V. Nuclear explosions and the gravity-time curve ---------- 197-201

alakrishna, S., and Lakshmi, B. R. Tidal constants at Hyderabad ---------- 201-98

alakrishna, S., and Subrahmanyam, Y. Variation of ultrasonic velocities in charnockites ---------- 194-115

alashev, A. N. See Vol'fshteyn, P. M.

alashov, D. B. See Volarovich, M. P.

alashov, V. N. See Voskoboynikov, G. M.

alavadze, B. K., and Shengelaya, G. Sh. Structure of the Earth's crust of the Greater Caucasus from gravity data ---------- 198-199

aldwin, J. E. Thermal radiation from the Moon and the heat flow through the lunar surface ---------- 196-63

aldwin, R. B. The measure of the Moon ---------- 202-38

alenko, V. G. Comparative evaluation of the quality of the separation of certain waves from the effect of disturbing waves in combined methods of harmonic analysis of earth tides ---------- 203-123

— Contribution of zero-point drift in R cos δ and R sin δ of certain earth tide waves ---------- 203-124

alkay, Bálint. On the similarity between the Little Hungarian Plain and the African rifts ---------- 198-136

alsamo, J. J. See Hemenway, C. L.

alsley, J. R., Meuschke, J. L., and Blanchett, Jean. Aeromagnetic maps of Michigan ---------- 203-287

alukhovs'kyy, M. P. Significance of the law of geologic cyclicity in natural science ---------- 203-184

alyasnyy, N. D., Dmitriyev, A. V., Ionov, V. A., and Nazarov, I. M. Spectrometric investigations of natural emanations using large-volume scintillators ---------- 201-314

alyasnyy, N. D., Vasilenko, V. N., Kogan, R. M., and Fridman, Sh. D. Discovery of aureoles of dispersion of radium according to the gamma-ray spectrum ---------- 203-309

anaś, Henryk. Organization of the work of seismic field parties as a condition for technical progress ---------- 201-339

anasevich, S. N. See Murin, A. N.

anerjee, K. N. On the effect of mutual reaction of the galvanometer and seismometer in the response characteristics of electromagnetic seismographs ---------- 201-85

anno, Noboru. On a relationship between decreasing of horizontal intensity and Kp-Indices ---------- 194-269

anwell, C. J. Thermal energy from the Earth's crust. Introduction and part 1 ---------- 200-224

arabashev, N. P., and Garazha, V. I. On the microstructure of the lunar surface ---------- 196-66

aranov, I. G. Status and ways of improving the procedure of geological prospecting and exploratory operations on oil and gas in the Dnieper-Donets basin ---------- 200-161

aranov, Vladimir. Observations [paper by D. S. Parasnis] ---------- 195-190

aranov, V. I. Radioactivity and geology ---------- 193-311

aranov, V. I., and Kunetz, Geza. Synthetic seismograms with multiple reflections ---------- 202-284

arber, A. J. See Miller, J. A.

arber, R. C., Cambey, L. A., Ormrod, J. H., Bishop, R. L., and Duckworth, H. E. Some precision mass differences between tin isotopes ---------- 194-234

arbu, Alexandrina. See Pomîrleanu, V.

arcala, J. See Gershanik, Simon.

Abstract

Barker, Harold, and Mackey, John. British Museum natural radiocarbon measurements IV ---- 203-28

Barkhatov, D. R. The NChMU low-frequency electrical surveying apparatus ---- 197-143

See also Semenov, A. S.

Barnes, D. F. See Carder, B.

Barnes, V. E., and Pitakpaivan, Kaset. Origin of indochinite tektites ---- 192-32

Barr, K. G., and Robson, G. R. Seismic delays in the eastern Caribbean ---- 200-101

See also Robson, G. R.

Barrett, A. H., and Lilley, Edward. Mariner-2 microwave observations of Venus ---- 203-61

Barrington, R. E., and Thompson, W. E. Whistlers and magnetic activity ---- 192-278

Barsenkov, S. N. See Pariyskiy, N. N.

Barsukov, O. A., and Avzyanov, V. S. Space-energy distribution of neutrons in the system borehole-stratum ---- 200-314

Barsukov, O. M., and Zybin, K. Yu. On the nonperpendicularity of the E and H variation vectors in the electromagnetic field of the Earth ---- 194-258

Barta, György. On the origin of geomagnetic secular variation ---- 195-233

—— The relationship between the eccentricity of the Earth's magnetic field and the triaxiality of the Earth ---- 198-217

—— The relationship of the eccentricity of the geomagnetic field to the triaxiality of the Earth ---- 195-234

Bartels, Julius. Discussion of time-variations of geomagnetic activity, indices Kp and Ap, 1932-1961 ---- 201-256

—— Geomagnetic disturbances and related phenomena ---- 192-285

—— Planetary geomagnetic activity in graphic representation: daily Cp, 1937-58, three-hour Kp, 1937-39, 1950-58 ---- 194-246

Bartels, Julius, and Chapman, Sydney. A twenty-one year series of geomagnetic disturbance data, presented with regard to the appearance of polar light in low latitudes ---- 194-254

Barth, T. F. W. Theoretical petrology ---- 200-171

Bartnitskiy, Ye. N. See Amirkhanov, Kh. I., and Brandt, S. B.

Bartolucci, Giorgio. See Penta, Francesco.

Barton, R. H. Differential isostatic rebound--possible mechanism for fault reflection through glacial drift ---- 194-185

Basin, Ya. N. See Kuhkarneko, N. K.

Bass, L. Heat balance of the Earth ---- 201-215

Bassett, W. A., and Giletti, B. J. Precambrian ages in the Wind River Mountains, Wyoming ---- 198-8

Bassett, W. A., Kerr, P. F., Schaeffer, O. A., and Stoenner, R. W. Potassium-argon ages of volcanic rocks near Grants, New Mexico ---- 198-6

—— Potassium-argon dating of the Late Tertiary volcanic rocks and mineralization of Marysvale, Utah ---- 198-7

Basta, E. Z. Natural and synthetic titanomagnetites (the system Fe_3O_4-Fe_2TiO_4-$FeTiO_3$) ---- 198-248

Bate, G. L., and Huizenga, J. R. Abundance of ruthenium, osmium, and uranium in some cosmic and terrestrial sources ---- 200-56

Bates, R. G. Aeroradioactivity survey and areal geology of the Oak Ridge National Laboratory area, Tennessee and Kentucky ---- 195-310

Bath, G. D. Magnetic anomalies and magnetizations of the Biwabik iron-formation, Mesabi area, Minnesota ---- 194-279

Båth, Markus. An earthquake catalogue for Fennoscandia for the years 1891-1950 ---- 194-70

—— On the measure of seismicity ---- 203-71

Abstract

Båth Markus, and López Arroyo, Alfonso. Attenuation and dispersion of G waves ---- 200-103

Båth, Markus, and Tryggvason, Eysteinn. Amplitudes of explosion-generated seismic waves. Pt. I: Iceland explosions in 1959 and 1960 ---- 192-116

— Deep seismic reflection experiments at Kiruna ---- 192-241

See also Duda, S. J., and Santo, Tetsuo.

Battelli, O. See Molina, F.

Battey, M. H. The Wairarapa Valley, New Zealand, chondrite ---- 192-27

Battistini, René. The absolute age of the notch of flandrien marine erosion at 1 to 1.3 m in the bay of Galions (extreme south of Madagascar) ---- 199-11

Baydyuk, B V. See Khuan, Zhun-Tszun'.

Bayramova, R. A. See Dzhafarov, Kh. D.

Bayramova, R. G. See Petrosyan, L. G.

Bazer, J., and Hurley, J. Geometrical hydromagnetics ---- 194-239

Beall, G. H. Age of authigenic biotite in the Utica shale ---- 195-10

Beall, G. H., Hurley, P. M., Fairbairn, H. W., and Pinson, W. H., Jr. Comparison of K-Ar and whole-rock Rb-Sr dating in New Quebec and Labrador ---- 202-10

Beals, C. S. The Dominion Observatory's contribution to Canadian geophysics ---- 200-174

Beals, C. S., and Innes, M. J. S. The study of fossil meteorite craters with the aid of geophysical and diamond drilling techniques ---- 194-52

Beard, D. B. Comets and cometary debris in the Solar System ---- 202-35

— The interaction of the terrestrial magnetic field with the solar corpuscular radiation. 2. Second-order approximation ---- 193-260

Beard, D. B., and Jenkins, E. B. Correction to the second approximation calculation of the geomagnetic field, solar wing interface ---- 193-261

Beauchamp, Jeanette. See Hulston, J. R.

Beaufils, Yvonne, Choudhury, M. A., and Rothé, J. P. Seismic records of May 1, 1962 ---- 196-172

Bedcher, A. Z. The electrical anisotropy of clays and its geological significance ---- 194-157

Bedcher, A. Z., Yeremina, A. S., and Shimanskaya, N. M. Distribution of reservoirs and characteristics of formation waters of the lower Pontian of the West Kuban depression according to the data of geophysical borehole investigations ---- 194-162

Bederke, E. Age subdivision and density distribution in the crystalline basement ---- 197-200

Beebe, B. W. See Childs, O. E.

Beekhuis, C. Earth-Cataclysms ---- 193-174

Begemann, Friedrich. See König, H.

Begishev, F. A., Mel'nikov, A. M., and Kinzikov, A. R. Attempt at surveying the Romashkino field ---- 200-163

Begiyev, B. B. Seismic intensities and deformations in the course of an earthquake, calculated with the aid of electronic machines - 203-92

Behnke, C., Giese, P., Prodehl, Cl., and de Visintini, G. Seismic refraction investigations in the Dolomites for the exploration of the Earth's crust in the eastern Alpine area 1961 ---- 193-241

See also Closs, Hans.

Behrendt, J. C. A statistical comparison of five geodetic gravimeters ---- 194-214

— The Filchner Ice Shelf, Antarctica. Summary of geophysical and glaciological investigations ---- 192-194

Behrendt, J. C., and Thiel, Edward. A gravity and magnetic survey of the Uinta Mountains ---- 196-237

Abstract

Behrendt, J. C., and Wold, R. J. Depth of magnetic "basement" in West Antarctica ---------- 197-299

Bein, Erich. Results of torsion-balance measurements on the Central German Main Line (Wittenberg fracture) ---------- 192-228

Beiser, Arthur. Hydromagnetic waves in the upper atmosphere and solar activity ---------- 203-242

Beland, J. See Poole, W. H.

Belelovskiy, M. L., and Zil'bershteyn, M. B. Use of correlation functions for interpretation of vertical electrical sounding curves ---------- 200-133

Belen'kiy, B. V., Leypunskaya, D. I., Sokolov, G. V., Spiridonov, V. P., and Tikhomirova, N. L. Spectral activation logging in sedimentary rocks ---------- 199-300, 201-324

Belikov, B. D. See Dobrokhotov, Yu. S., and Pariyskiy, N. N.

Belikov, B. P. The elasticity and strength of rocks ---------- 199-81

Belin, Michel. Seismic sounding of the Saint Sorlin glacier ---------- 193-337

Bell, Barbara. A long-term north-south asymmetry in the location of solar sources of great geomagnetic storms ---------- 192-286

—— Solar radio bursts of spectral types II and IV: Their relations to optical phenomena and to geomagnetic activity ---------- 200-272

Bell, Barbara, and Wolbach, J. G. On short-period relations between north-south asymmetry in spottedness and in great-storm sources ---------- 192-287

Bell, R. A. See Hallof, P. G.

Bellair, Pierre, and Delbos, Leon. Absolute age of the last granitization in Adelie Land ---------- 194-22

Belomar, O. D. About the effect of boron distribution in rocks on the absorption of slow neutrons ---------- 192-327

Belomar, O. D., Zaychenko, V. Yu., Kirichenko, N. M., and Chuyun, A. B. Results of testing neutron-neutron logging on the Donets basin coal deposits ---------- 203-312

Belon, A. E. See Flock, W. L.

Belotelov, V. L., and Kondorskaya, N. V. Problem of calculation of the enery of earthquakes ---------- 193-76

Belotelov, V. L., Kondorskaya, N. V., and Savarenskiy, Ye. F. Determining energy of elastic waves caused by earthquake ---------- 192-87

Belotelov, V. L., and Rykunov, L. N. Device for digitizing seismograms ---------- 202-73

Belousov, V. G., Vol'vovskiy, B. S., Vol'vovskiy, I. S., and Ryaboy, V. Z. Experimental investigations in recording deep reflected waves ---------- 193-340

Belousov, V. V. Basic problems in geotectonics ---------- 197-176

—— Development of the Earth and tectogenesis ---------- 193-171

—— Folds of the Earth's crust ---------- 195-146

—— Fundamental problems of geotectonics, 2d ed ---------- 196-213

—— On the significance of deep seismic sounding for the solution of theoretical and practical problems of geology ---------- 194-312

Belousova, M. G. Results of analysis of the geophysical logging data on the Kashiro-Podol sediments of the Arlan area ---------- 202-101

Belov, N. V. See Stishov, S. M.

Belshé, J. C. See Uyeda, Seiya.

Beluzin, Yu. V. On ways of analyzing systematic variation of the physical properties of rocks ---------- 195-137

Belyayev, V. M. See Komarov, A. G.

Belyayevskiy, N. A., and Fedynskiy, V. V. Deep drilling as a method of studying the Earth's crust ---------- 202-178

—— Study of the deep subsurface and goals of super-deep drill holes ---------- 198-198

Belykh, V. A., Sen'ko-Bulatnyy, I. N., Shulyat'yev, S. A., and Yakub, L. I. On the effect of the activation of silicon by fast neutrons in the activation analysis of bauxites ---------- 201-321

Abstract

emmelen, R. W. van. Geology and geophysics (methods and some results) ---------- 195-144
— Magmatic diapirism and tectonic deformation ---------- 197-185
— Volcanology and geology of ignimbrites in Indonesia, North Italy, and the U. S. A ---------- 202-338
encze, Pál. On the relation between lightning striking-places and geologic structure ---------- 192-123
— On the relationship between places struck by lightning and geologic structure ---------- 198-110
endefy, László. Seismotectonic investigations in the western part of Trans-Danubia ---------- 197-75
ender, V. R. See Hopson, C. A.
enesh, Konrad. Features of similarity and difference in the geologic evolution of the Earth-Moon system ---------- 196-70
engtson, K. B. Recent history of the Brady Glacier, Glacier Bay National Monument, Alaska, U. S. A ---------- 198-9
enjamin, R. E. "Missile age" designs play big role ---------- 194-159
en-Menahem, Ari, and Cisternas, Armando. Discussion on "Diffraction of electromagnetic waves by an inhomogeneous sphere" by J. G. Negi ---------- 203-151
See also Toksöz, M. N.
ennett, G. D. See Patten, E. P., Jr.
ennett, H. E. See Crary, A. P.
enson, W. E. Drilling beneath the deep sea ---------- 200-234
ent, A. M., and Wright, H. E., Jr. Pollen analyses of surface materials and lake sediments from the Chuska Mountains, New Mexico ---------- 200-12
entley, C. R., and Giovinetto, M. B. Ice-flow studies on the ice dome of Roosevelt Island, Antarctica ---------- 192-193
eránek, Břetislav; Horová, Milena; and Zounková, Milada. Interpretation of short sections of traveltime curves of reflected waves using ray diagrams in the area of the Vienna basin ---------- 194-309
eránek, Břetislav, and Zounková, Milada. Interpretation of seismic refraction measurements in the Rimavska Sobota area using the zero-time refraction method ---------- 194-336
erbitskiy, T. Z. On the possibility of applying spectral analysis in electrical surveying ---------- 193-133
erckhemer, Hans. The spread of the rupture surface at the earthquake focus and its effect on the seismic wave spectrum ---------- 194-76
erdichevskiy, M. N. Electrical prospecting by the telluric current method ---------- 198-42
— Prospects of magnetotelluric profiling ---------- 195-38
erdichevskiy, M. N., Bryunelli, B. Ye., Lantsov, A. Ye., and Raspopov, O. M. Use of natural electromagnetic variations for investigation of the upper layers of the Earth ---------- 197-63
erdichevskiy, M. N., Kopelev, Yu. S., and Lantsov, A. Ye. Study of the geology of the northern part of the West Siberian Lowland by the method of magnetotelluric profiling ---------- 199-57
erdichevskiy, M. N., and Nikitenko, K. I. Procedure of determination of the stratigraphic affinities of a marker horizon in the telluric current method ---------- 200-81
erdichevskiy, M. N., and Shuldeyev, M. P. New procedures for the treatment of observations in the telluric current method and magnetotelluric profiling ---------- 200-79
erdichevskiy, M. N., and Yakovlev, I. A. The latest in the method of telluric currents ---------- 201-62
erezin, D. A. Use of radiometric methods for the solution of some geologic problems ---------- 198-288
erg, J. W., Jr., and Baker, C. D. Oregon earthquakes, 1841 through 1958 ---------- 196-104
See also Stephenson, L. P.

Abstract

Berg, O. E. See Dubin, Maurice.
Berger, K. Br. Radiometric measurements and their utilization for the geology of the map area of Röttenbach ---- 193-318
Bergh, H. W. See Van Wijk, A. M.
Bernardi, A. See Norinelli, A.
Berninghausen, W. H. Tsunamis reported from the west coast of South America ---- 193-89
Bernshteyn, D. A. See Gulin, Yu. A.
Bernshteyn, V. A. Procedural bases of the study of magnetic anomalies in volcanic regions ---- 202-231
Berry, E. G. See Rubin, Meyer.
Bershteyn, P. Ya. Solution of Lamb's problem for a medium with weak anisotropy ---- 199-77
Berzon, I. S. Methods and some results of interpretation of data of seismic waves' spectrum analysis ---- 192-328
Beschastnikova, G. S. See Yesikov, A. D.
Beschastnova, G. S. See Yesikov, A. D.
Bespalov, D. F., and Odinokov, V. P. Results of the use of impluse neutron-neutron logging in the investigation of oil wells in Azerbaijan ---- 199-293
Best, G. T. The accretion of meteoritic material by the Earth ---- 193-41
Bettinali, C. See Ancarani, L.
Beucher, Francoise, and Conrad, Georges. The age of the last Pluvial in the Sahara. Analysis of the flora of a lacustrine episode ---- 203-14
Bezruk, I. A., and Kamenetskiy, F. M. Problem of interpretation of data of high frequency induction electrical prospecting for regions with low resistance blanketing deposits ---- 194-131
Bezrukov, P. L. Investigations in the Indian Ocean on the 33rd cruise of the expeditionary vessel "Vityaz" ---- 193-354
Bezuglaya, L. S., Martynova, T. A., Petrova, G. N., and Rybak, R. S. Clarification of the origin of the magnetization of rocks by the method of comparison of stability characteristics in the example of the ferruginous quartzites of the Kursk magnetic anomaly ---- 198-252
Bhandari, N., and Rama. Study of atmospheric washout processes by means of radon decay products ---- 203-302
Bhattacharya, J. On the dispersion curves for Love waves due to irregularity in the thickness of the transversely isotropic crustal layer ---- 201-103
—— On the strong SH-motion in clay overlying hard elastic material due to explosions ---- 197-118
Bhattacharya, J., and Das Gupta, S. C. On leaking modes coupled with shear waves ---- 202-87
Bhattacharya, P. K. See Gupta, R. N.
Bhattacharyya, B. K. Electromagnetic fields of a vertical magnetic dipole placed above the Earth's surface ---- 201-117
Bhattacharyya, B. K., and Morrison, H. F. Some theoretical aspects of electrode polarization in rocks ---- 202-91
Bhimasankaram, V. L. S. See Rao, B. S. R.
Bibikova, Ye. V. See Tugarinov, A. I.
Bible, J. L. Reply by author to discussion by Stephen Thyssen-Bornemisza and W. F. Stackler ---- 203-192
—— Terrain correction tables for gravity ---- 195-188
Bien, G. S. See Hubbs, C. L.
Bigg, E. K. Lunar and planetary influences on geomagnetic disturbances ---- 202-207
—— The influence of the Moon on geomagnetic disturbances ---- 197-242
Bilski, Edmund. On the conditions and ways of introducing the Moon-Sun correction in gravimetry ---- 201-200

Abstract

ilski, Edmund. Present problems of gravity anomalies in gravity exploration ---------- 197-207

inns, R. A., and Miller, J. A. Potassium-argon age determinations on some rocks from the Broken Hill region of New South Wales ---------- 203-20

irch, Francis. Recent studies bearing on the composition of mantle and core ---------- 202-190

ird, J. B. B. P.: Before present, or bad policy? ---------- 197-2

irdler, R. W. See Uyeda, Seiya.

ischoff, A. A. The pseudotachylite of the Vredefort Dome ---------- 203-50

ishop, R. L. See Barber, R. C.

ishopp, D. W. The Vredefort ring: A further consideration ---------- 192-30

isztricsány, Ede. Dispersion of Rayleigh waves along a mainly Atlantic path ---------- 199-68

isztricsány, Ede, and Kiss, Zoltan. A body-wave magnitude equation for shallow-focus earthquakes ---------- 193-74

itoun, Jacky. See Lebeau, André.

jerhammar, Arne. A general method for an explicit determination of the shape of the earth from gravimetric data ---------- 192-176

jork, R. L. Analysis of the formation of Meteor Crater, Arizona: A preliminary report ---------- 194-54

jørlykke, H., and Burger, A. J. The age of the Bjertnes uraninite ---------- 202-16

jörnsson, S. See Israël, Hans.

lachut, T. J. Photogrammetric determination of glacier movement, rate of ablation, and profiles ---------- 202-145

lack, G. A., and Johnston, R. B. A test of magnetometry as an aid to archaeology ---------- 194-284

lack, R. A., Frischknecht, F. C., Hazelwood, R. M., and Jackson, W. H. Geophysical methods of exploring for buried channels in the Moument Valley area, Arizona an Utah ---------- 197-156

lack, R. F. Paleomagnetism of part of the Purcell system in southwestern Alberta and southeastern British Columbia ---------- 199-242
See also Larochelle, André.

lackett, P. M. S. On distinguishing self-reversed from field-reversed rocks ---------- 197-261

lake, M. C., Jr. See Moore, J. G.

lake, Weston, Jr. See Olsson, Ingrid.

lakeman, E. R. A method of analyzing electrical logs recorded on a logarithmic scale ---------- 193-143

lanc, Claude. See Harms, Gunter.

lanc, Daniel. See Fontan, Jacques, Harms, Gunter, and Teyssier, J.-L.

lanchett, Jean, Tyson, N. S., and McGowan, Ernest. Aeromagnetic map of the Gaithersburg and part of the Sandy Spring quadrangle, Montgomery County, Maryland ---------- 200-290
— Aeromagnetic map of the Germantown and part of the Poolesville quadrangles, Montgomery and Frederick Counties, Maryland ---------- 199-264
— Aeromagnetic maps of Maryland and Virginia ---------- 199-265
See also Balsley, J. R.

lankov, Ye. B., and Blankova, T. N. New possibilities of the method of induced activity (NA) in connection with operation of wells through a pump-compressor casing ---------- 199-294

lankov, Ye. B., and Salimova, Z. G. Nomograms for separating three-component curves decay induced activity ---------- 199-295

lankova, T. N. Calculation of the rate of movement of saline water according to the results of measurements of the induced activity of sodium ---------- 199-297
— Use of radioactive isotopes and radiation for the investigation of oil wells in Tatary ---------- 199-296
See also Blankov, Ye. B.

Abstract

Blásquez L., Luis. The geysers, solfatarasand springs of the range of San Andres ---------- 195-347
—— The possible sources of geothermal energy in the Republic of Mexico ---------- 195-206
Blinnikov, I. A. See Kalinin, N. A.
Blizard, R. B. See Kokesh, F. P.
Blokh, I. M. Electrical profiling by the resistivity method ---------- 198-102
—— Increase in the effectiveness of electrical profiling in connection with geological mapping ---------- 202-99
Blokh, I. M., and Shemyakin, Ye. A. A screened three-electrode arrangement and an experiment in its application to electric profiling ---------- 194-128
Blokhin, P. A. See Borisov, A. A., Shiryayev, I. Ye., and Yurkova, L. A.
Blomqvist, N. G. See Wickman, F. E.
Blot, C., and Priam, R. Volcanism and seismicity in the New Hebrides Archipelago ---------- 203-339
Blue, D. M. See Ludwig, W. J.
Blum, P.-A., and Jobert, Georges. Spectral analysis of gravity variations ---------- 194-90
See also Connes, J.
Blum, Ronald. The interaction between the geomagnetic field and the solar corpuscular radiation ---------- 200-247
Blume, J. A. A structural-dynamic analysis of steel plant structures subjected to the May 1960 Chilean earthquakes ---------- 197-94
Blundell, D. J. Palaeomagnetic investigations in the Falkland Islands Dependencies ---------- 201-285
Blyumentsev, A. M. Determination of the iron content of ores by neutron logging methods ---------- 201-322
Boaga, Giovanni. Gravimetric survey of the city of Rome ---------- 196-240
Bóbr-Modrakowa, Irena, Droste, Zofia, and Hordejuk, Józef. Formula for determining magnitude from surface waves for the Warsaw station ---------- 193-75
Bobrov, M. S. Types of irregular geomagnetic disturbances and mechanisms of the influence of a solar corpuscular stream on the outer atmosphere ---------- 195-268
Bobrov, V. N. A series of quartz magnetic variometers ---------- 203-264
Bödvarsson, Gunnar. Physical characteristics of natural heat resources in Iceland ---------- 195-207
Bödvarsson, Gunnar, and Palmason, G. Exploration of subsurface temperature in Iceland ---------- 195-208
Boelrijk, N. A. I. M. See Priem, H. N. A.
Boerboom, A. J. H. See Priem, H. N. A.
Bogdanov, A. A. See Vlasov, A. Ya.
Bogdanov, B. N. See Meyer, V. A.
Bogdanova, O. I. See Kalenov, Ye. N.
Bogert, B. P. Correction of seismograms for the transfer function of the seismometer ---------- 193-96
Bogoyavlenskaya, G. Ye. Agglomerate flow Bezymiannyy volcano-- 202-327
Böhme, Annelies. The focusing effect of solar plasma streams on fast solar particles ---------- 195-260
Bois, Pierre, Chauveau, Jean, Grau, G., and Lavergne, M. Synthetic seismograms (possibilities, methods of obtaining, and limitations) ---------- 202-283
Bojo, Toshiatsu, Hayashi, Shoichiro, and Onoé, Toru. Report on the reconnaissance radiometric survey in Ani-machi and its adjacent area, Akita Prefecture ---------- 198-299
Bokun, Jerzy. Remarks on the use of gravimetric data for working up a triangulation network ---------- 203-166

Abstract

oletin Sismológico del Servicio Geológico Nacional de El Salvador. Preliminary seismic map of the Republic of El Salvador -------- 197-74
— Report on the installation of our new seismological station at La Palma -- 201-87
olfa, Joseph. Contribution to the study of the ferromagnetic elements of the historic lava flows of Etna (Sicily) --------------- 198-249
olfa, Joseph, and Delattre, Ch. Apropos of ferromagnetic elements of dolerites of the regions of Barnénés and Run (Finistère) -- 199-236
olinger, J. See Silver, L. T.
ollinger, Gilbert. See Stauder, William.
ol'shakov, A. S. Temperature separation of thermoremanent and viscous components of magnetization ----------------------- 203-273
ol'shakov, A. Yu. See Ochkur, A. P., and Sokolov, M. M.
ol'shikh, S. F. The UZS-2-60 seismoscope ------------------ 199-84
olt, B. A. A seismic experiment using quarry blasts near Sydney- 197-129
— Gutenberg's early PKP observations ---------------------- 193-91
— Revised torsional eigenperiods from the 1960 Trieste data ----- 201-83
See also Landisman, Mark, and Winch, D. E.
oltneva, L. I., Vasilenko, V. N., Dmitriyev, A. V., Ionov, V. A., Nazarov, I. M., and Yagodovskiy, I. V. Attempt to determine radium, thorium, and potassium in rocks from an airplane carrying a NaI(Tl) crystal detector -------------------------- 193-314
olyubakh, K. A. See Lebedev, T. S.
ombolakis, E. G. See Brace, W. F.
omford, B. G. Geodesy ------------------------------------ 200-183
ondarchuk, V. G. On the origin of the Earth's crust------------ 198-194
ondarchuk, V. G., Zamoriy, P. K., and Sokolovskiy, I. L. Recent tectonic movements of the territory of the Ukrainian SSR and Moldavian SSR -- 195-161
ondarenko, A. T. Investigation of the temperature relation of the dielectric constant and the tangent of the angle of dielectric loss of rocks at different frequencies ---------------------------- 202-102
ondarenko, L. P. Granites of the Upper Katarchean of the basins of the Voron'ya River and of the upper reaches of the Teriberki River -- 200-31
— Migmatites of the microcline granites of the Saam intrusive complex developed to the south of the Polmos and Poros formations --- 201-18
— Supercrustal complex of the Upper Katachean---------------- 200-30
ondarenko, L. P., and Dagelayskiy, V. B. Syenite migmatites--- 200-36
ondarev, V. I. Field of a disc electrode located in a borehole ---- 202-92
— Selection of optimum angles of inclination of seismographs in azimuthal apparatus------------------------------------- 202-270
onetti, A., Bridge, H. S., Lazarus, A. J., Rossi, B., and Scherb, F. Explorer 10 plasma measurements --------------- 202-205
onhomme, Michel. Contribution to the geochronological study of the platform of West Africa ---------------------------- 194-13
onhomme, Michel; Buffière, J.-M.; Michel, Robert; Philibert, Josette; Roques, Maurice; and Vialette, Yves. Absolute age of the Rochail massif (northwest sector of the Pelvoux massif, Isère) -- 200-24
onini, W. E. Gravity anomalies in Idaho --------------------- 203-204
onnafous, M. See Fontan, J.
onner, F. T., Roth, E., Schaeffer, O. A., and Thompson, S. O. Chlorine-36 and deuterium study of Great Basin lake waters----- 192-247
oocock, C. Special investigations. Geophysics ----------------- 195-122
ooks, K. G. Aeroradioactivity survey and related surface geology of parts of the Los Angeles region, California ----------------- 196-317

Abstract

Borchert, H. Chemistry and petrology of the Earth's layers and the origin and development of the most important discontinuities of the Earth's crust --- 194-221
See also Anger, Gerh.
Bordet, Pierre, Marinelli, G., Mittempergher, M., and Tazieff, Haroun. Contribution to the volcanological study of Katmai and the Valley of Ten Thousand Smokes --- 203-336
Borg, Iris; Friedman, Melvin; Handin, John; and Higgs, D. V. Experimental deformation of St. Peter sand: a study of cataclastic flow --- 195-334
Borisevich, A. S. Results of seismic investigations in the area of the gravity anomaly of the Zaterech Plain --- 199-344
Borisevich, I. V. See Afanas'yev, G. D.
Borisevich, Ye. S. New devices for photographic and directly visible recording for the registration of seismic processes --- 203-111
Borisov, A. A. Main tasks in the area of increasing the effectiveness of geophysical investigations --- 197-160
—— On the evolution of the Earth's crust in the process of tectogenesis --- 198-149
Borisov, A. A., Blokhin, P. A., Shirokov, A. S., and Shneyerson, M. B. Method of coordinated geophysical study of oil-gas structures of platform areas --- 196-199
Borisov, A. A., and Kosygin, Yu. A. The use of geophysical methods of investigation in the study of tectonic structures --- 198-144
Borisov, A. A., and Kruglyakova, G. I. Deep crustal structure of the Transcarpathians --- 196-260
Borisova, K. D. See Maslenikov, V. A., and Priyatkina, L. A.
Boronin, V. P. On the relation between gravity anomalies and areas where Upper Devonian and Lower Carboniferous continental deposits are developed in the Tatar ASSR --- 195-198
Borskiy, E. A. See Mudretsova, Ye. A.
Bortfeld, Reinhard. Approximations to the reflection and transmission coefficients of plane longitudinal and transverse waves --- 196-152
—— Reflection and refraction of spherical compressional waves at arbitrary plane interfaces --- 196-151
Borucki, Jerzy. Absolute age of pitchblende from the Kruszcowe Mountains --- 201-15
Bose, S. K. On G-waves and long-period surface waves of severe earthquakes --- 194-85
—— Wave propagation in marine sediments and water saturated soils --- 197-121
Bosov, V. D., and Vysotskaya, V. I. Magnetic properties of the Neogene rocks of the Tadzhik depression --- 201-277
Bossolasco, Mario; Cicconi, Giuseppe, and Eva, Claudio. The thermal conductivity of some Italian rocks --- 199-186
Bostrom, C. O. See Pieper, G. F., and Zmuda, A. J.
Bosykh, Yu. A. See Poletayev, B. D.
Botezatu, Radu. Gravimetric investigations in the region of Pitesti-Goleşti --- 200-215
—— Gravity anomalies in the region lying between the Olt and Dimbovita Rivers --- 200-214
—— Gravity prospecting in the Valea Resca region --- 199-175
—— Measurements with a Carter gravimeter in the Rîmnicul Sărat region --- 199-178
Botezatu, Radu, Bacioiu, Traian, and Andrei, Justin. Relation between gravity anomalies, the geologic structure of north Dobrogea and adjacent parts of south Moldavia and east Muntenia --- 192-232
See also Constantinescu, Liviu.
Bott, M. H. P. Gravity anomalies over granites and their relation to the continental crust --- 198-205

Abstract

ouville, André. See Fontan, Jacques.

ovenkerk, H. P. See Wentorf, R. N.

owen, E. G. A lunar effect on the incoming meteor rate --------- 198-30

owen, Robert. Paleotemperature analyses of Jurassic Belmnoidea from East Greenland --------- 196-298

ower, D. R., and Watt, P. A. The second-order errors of sea-surface gravity measurements --------- 195-196

ower, M. E. Sea magnetometer surveys off southwestern Nova Scotia, from Sable Island to St. Pierre Bank, and over Scatari Bank --------- 197-296

owers, R. Oceanography: Modern methods of sub-bottom profiling using sonic reflection techniques --------- 198-356

owie, S. H. U. Atomic energy division --------- 197-19

owin, C. A new system for the automatic measurement of gravity at sea --------- 193-211

owman, A. L. See Rusnak, G. A.

oyarov, A. T. Effect of surface conditions of reservoirs on the specific electrical resistance --------- 198-123

oyarskikh, G. K., Nikonov, V. F., Prokopenko, V. I., Rovnina, L. V., Romanov, F. I., and Yastrebova, T. A. Research drill holes of the USSR Berezovo research drill hole (Tyumen Region)- 194-165

oyd, F. R., and England, J. L. Effect of pressure on the melting of diopside, $CaMgSi_2O_6$, and albite, $NaAlSi_3O_8$, in the range up to 50 kilobars --------- 195-218

oyd, G. M. The conjugacy of magnetic disturbance variations ---- 196-275

oyd, W. W., Jr. See Crary, A. P.

oyer, R. E. Petrology and structure of the southern Wet Mountains, Colorado --------- 194-9

race, W. F. Orientation of anisotropic minerals in a stress field: discussion --------- 195-330

race, W. F., and Bombolakis, E. G. A note on brittle crack growth in compression --------- 201-354

radner, Hugh. Probing sea-bottom sediments with microseismic noise --------- 197-300

rady, L. F. See Breed, W. J.

raginskiy, S. I. On the structure of the F layer and the causes of convection in the Earth's core --------- 200-237

ramley, E. N. A note on the theory of Moon echoes --------- 197-59

randt, S. B. Apropos of the discussion by E. K. Gerling -------- 199-4

randt, S. B., and Bartnitskiy, Ye. N. Losses of radiogenic argon in K-Na feldspars by thermal activation --------- 195-7

randt, S. B., and Voronovskiy, S. N. Quantitative interpretation of the kinetics of emission of lead isotopes from pitchblende----- 202-3

See also Amirkhanov, Kh. I.

raun, I. Possibility of distinguishing shale from limestone by two beams of radioactive radiation --------- 198-306

raun, T. H., and Wheatley, G. Y. Electrical panel for analyzing the results of dipmeter measurements --------- 198-128

ray, E. E. See Emery, K. O.

redikhin, I. S. On the problem of the procedure of prospecting and exploratory operations in the South Yakutsk coal basin ------ 200-147

reed, W. J., and Brady, L. F. A new siderite from the Canyon Diablo fall --------- 198-28

remer, Hans. See Grosse, Siegfried.

reusse, J. J. Geophysical exploration and mining research ------ 197-167

— Geophysical methods and the search for ground water --------- 199-127

— Modern geophysical methods for subsurface water exploration-- 203-150

rewer, M. C. See Lachenbruch, A. H.

riden, J. C. See Irving, E.

ridge, H. S. See Bonetti, A.

Abstract

Briggs, M. H. Evidence of an extraterrestrial origin for some organic constituents of meteorites ---- 199-30

—— Properties of the organic microstructures of some carbonaceous chondrites ---- 192-16

Briggs, R. B. Geosonic phase blaster ---- 195-322

Brochu, Michel. The inclinations in Greenland, their tectonic significance, and their comparison with other regions of the globe ---- 198-155

Brockamp, Bernhard. Barographic-topographic altitude curves ---- 196-225

Brod, R. J., Hammons, R. H., and Hinrichs, F. W. Reconnaissance aeromagnetic profiles, northeast Texas ---- 199-268

Broda, E. See Kalab, E.

Brode, H. L., and Parkin, B. R. Calculations of the blast and close-in elastic response of the cavity explosions in the Cowboy program ---- 200-121

Brodskaya, S. Yu. Study of the magnetic characteristics of single-component specimens depending on the concentration of ferromagnetics in connection with thermomagnetization ---- 195-276

Broecker, W. S. A preliminary evaluation of uranium series in equilibrium as a tool for absolute age measurement on marine carbonates ---- 201-4

—— The contribution of pressure-induced phase changes to glacial rebound ---- 193-177

Broecker, W. S., and Farrand, W. R. Radiocarbon age of the Two Creeks forest bed, Wisconsin ---- 202-7

See also Giffin, Charles.

Brokaw, A. L., Gott, G. B., Mabey, D. R., McCarthy, Howard, and Oda, Uteana. Mineralization associated with a magnetic anomaly in part of the Ely quadrangle, Nevada ---- 197-289

Bromery, R. W., Galat, G. A., and Chandler, E. J. Aeromagnetic maps of Virginia ---- 197-286

Bromery, R. W., Galat, G. A., and Gilbert, F. P. Aeromagnetic map of the Contrary Creek quadrangle, Louisa and Spotsylvania Counties, Virginia ---- 199-266

—— Aeromagnetic maps of Virginia ---- 197-285

Bromery, R. W., Gilbert, F. P., and others. Aeromagnetic maps of Maryland ---- 197-284

Bromery, R. W., Long, C. L., and others. Aeromagnetic map of the Stacyville quadrangle and part of the Katahdin quadrangle, Penobscot and Piscataquis Counties, Maine ---- 197-273

Bromery, R. W., McGowan, E. F., and others. Aeromagnetic maps of Maine ---- 197-274

Bromery, R. W., Soday, Harry, and others. Aeromagnetic map of the Spencer Lake quadrangle, Franklin and Somerset Counties, Maine ---- 200-288

Bromery, R. W., Tyson, N. S., and others. Aeromagnetic map of part of Caucomgomoc Lake quadrangle, Somerset and Piscataquis Counties, Maine ---- 197-276

—— Aeromagnetic map of part of the Traveler Mountain quadrangle, Piscataquis and Penobscot Counties, Maine ---- 202-233

—— Aeromagnetic map of the Stratton quadrangle, Franklin and Somerset Counties, Maine ---- 199-258

Bromery, R. W., Vargo, J. L., and others. Aeromagnetic map of the Greenville quadrangle and part of the Sebec Lake quadrangle, Piscataquis and Somerset Counties, Maine ---- 199-260

See also Anderson, L. A., and Popenoe, Peter.

Bronshten, V. A. Phenomena accompanying the flight of large meteors in the atmosphere ---- 203-49

Brooks, B. G. See Romney, Carl.

Brooks, J. A. Seismic wave velocities in the New Guinea-Solomon Islands Region ---- 202-180

Abstract

roten, N. W. See Medd, W. J.

rouwer, H. A. Extrusive vulcanism with reference to earth movements ---------- 203-314

rovar, V. V. The solution of some external boundary value problems for the Earth's surface ---------- 203-172

rown, Harrison. The density and mass distribution of meteoritic bodies in the neighborhood of the Earth's orbit ---------- 193-45

ee also Moore, C. B., Nichiporuk, Walter, and Watson, Kenneth.

rown, J. H. Elasticity and strength of sea ice ---------- 201-114

— Measurements by NEL for Project Ice Way ---------- 192-348

rown, J. S. Ore leads and isotopes ---------- 197-233

rown, M. V. Seismic profile in St. Andrew Bay ---------- 192-336

rown, P. E. See Miller, J. A.

rown, R. R. See Ortner, J.

rown, R. S. Transit time fluctuations of waves ---------- 193-163

rowne, B. C. Memorandum on the technique of measuring relative gravity values on land by means of pendulums ---------- 192-213

rundage, H. T. Better interpretation through better data handling ---------- 201-164

rune, J. N., and Dorman, James. Seismic waves and earth structure in the Canadian shield ---------- 196-257

rune, J. N., Espinosa, Alvaro, and Oliver, J. E. Relative excitation of surface waves by earthquakes and underground explosions in the California-Nevada region ---------- 200-100

rune, J. N., and Pomeroy, P. W. Surface wave radiation patterns for underground nuclear explosions and small-magnitude earthquakes ---------- 203-146

ee also Ewing, Maurice.

yant, D. A., Cline, T. L., Desai, U. D., and McDonald, F. B. Explorer 12 observations of solar cosmic rays and energetic storm particles after the solar flare of September 28, 1961 ---------- 194-264

yant, H. L. Geophysical methods of control after completion of wells ---------- 198-129

yunelli, B. Ye. See Berdichevskiy, M. N.

yzzhev, L. D., Leykin, A. Ya., and Sopel'nikov, M. D. A determination of the frequency of a molecular generator and the irregularities of the earth's rotation ---------- 196-136

ben, Jiří. On methods of geophysical determination of vibrations in coal mining ---------- 192-354

cha, Václav. Verification of applicability of rocks in paleomagnetism ---------- 200-283

char, E. Determination of some parameters of the gravity field of the earth from the rotation of the nodal line of artificial satellites ---------- 192-208

cher, W. H. Are cryptovolcanic structures due to meteorite impact? ---------- 199-36

chs, Armand, Chessex, Ronald, Krummenacher, Daniel, and Vuagnat, Marc. "Total lead" ages determined by X-ray fluorescence on zircons of some Alpine rocks ---------- 199-18

chwald, Vagn. The iron meteorite "Thule," North Greenland ---------- 192-25

ck, K. L. See Cannon, R. S., Jr.

danov, V. I., Ionin, A. S., Kaplin, P. A., Medvedev, V. S., and Vladimirov, A. T. Present-day vertical movements of Far Eastern seacoasts of the USSR ---------- 197-187

dd, W. Glaciology of the Budd Coast and its hinterland - A progress report ---------- 198-161

dnikov, N. P. See Kalinin, N. A.

ettner, K. J. K. The Moon's first decimeter ---------- 202-43

ffière, J.-M. See Bonhomme, Michel.

Abstract

Buffington, E. C., and Moore, D. G. Geophysical evidence on the origin of gullied submarine slopes, San Clemente, California ---- 200-354

Bugayevskiy, G. N. Certain conclusions on the structure of the Earth's mantle and Jeffrey's traveltime curves ---- 195-221

—— On the nature of discontinuities in the mantle and in traveltime curves of longitudinal waves ---- 195-222

Bugaylo, V. A. Methodology of geologic interpretation of gravity and magnetic data in the Turgay depression ---- 196-242

Bugel'skaya, L. V. Bibliography of domestic and foreign literature on the determination of the absolute age of rocks and minerals for the years 1958-60 ---- 199-25

Buist, M. On the problem of noise on L. P. seismographs ---- 198-81

Bujnowski, Wacław. First-order base gravimeter network of Poland ---- 198-184

Bukhmastov, A. F. See Rabinovich, B. I.

Bulakh, Ye. G. A practical method of calculating the depth and excess mass of the two-dimensional body on the basis of the Δg anomaly ---- 199-155

—— On an approximate method of determining the excess mass and depth of occurrence of a two-dimensional body from the Δg anomaly ---- 200-202

—— On interpretation of gravity anomalies that are complicated by regional effects ---- 192-209

—— On the calculation of the depth of occurrence and mass excess of a three-dimensional body from the Δg anomaly, eliminating the error in determination of the normal field ---- 201-198

—— On the estimation of the depth of occurrence and mass excess of a three-dimensional body from the gravity anomaly ---- 199-156

—— On the estimation of the depth of occurrence and mass excess of a two-dimensional body from the Δg anomaly, eliminating the error in determination of the normal field ---- 198-177

—— Problem of the determination of the excess mass and depth of occurrence of a two-dimensional body from the Δg anomaly ---- 199-153

Bulashevich, Yu. P., Sen'ko-Bulatnyy, I. N., and Deyev, L. L. Gamma-spectrometric activation logging ---- 192-324

Buldyrev, V. S., and Yanson, Z. A. Propagation of SH interference waves in an elastic spherical layer, Pt. 1 ---- 200-113

Bulgakov, Yu. I., and Veshev, A. V. Use of low frequency alternating current in electrical profiling and sounding ---- 197-137

Bulin, N. K. Attempt to record explosions with low-frequency seismic apparatus ---- 194-119

Bulina, L. V. Use of aeromagnetic survey information for study of deep crustal structure within the Siberian platform ---- 194-283

Bull, C. Gravity observations in the Koettlitz Glacier area, southern Victoria Land, Antarctica ---- 196-244

See also Stuart, A. W.

Bullard, E. C. The deeper structure of the ocean floor ---- 192-357

Bullard, F. M. Volcanoes of southern Peru ---- 202-337

Bullen, K. E. Earth's central density ---- 195-225

—— Seismic travel-times and velocity distributions ---- 193-106

Bullerwell, W. Boreholes in the Carboniferous rocks of the Ashover district, Derbyshire. Appendix C - Electrical tests in the boreholes ---- 196-190

—— Geophysical department ---- 197-159

Bulmasov, A. P. On the relationship of the regional magnetic anomalies of the Siberian platform with the basaltic layer of the Earth's crust ---- 193-250

—— Structures and gravity anomalies of cryogenic origin in the Peri-Baikal area ---- 200-221

Abstract

llow, Kurd von. Corrections to the picture of the back side of the moon ---- 197-60

— What do we know of the back side of the Moon? ---- 192-41

une, V. I. On the use of maps of seismic regionalization of different scales for the determination of estimated intensity ---- 197-71

See also Medvedev, S. V.

unker, C. M. Gamma-radioactivity measurements of drill holes, wells, and the Gnome drift ---- 194-292

un'kov, A. M. See Khalevin, N. I.

urdick, G. A., and Straley, H. W., III. The Beaufort, South Carolina, magnetic low ---- 202-237

urdin, Yu. B. See Utkin, V. I.

urdine, N. T. Rock failure under dynamic loading conditions ---- 198-347

urger, A. J. See Bjørlykke, H., and Clifford, T. N.

urkser, Ye. S. Age of meteorites ---- 194-43

urkser, Ye. S., Alekseyeva, K. N., Vetshteyn, V. Ye., Gol'denfel'd, I. V., Davidyuk, L. A., Demidenko, S. G., Yeliseyeva, G. D., Leckekhlev, V. R., and Shcherbak, M. P. On the accuracy of determination of the absolute age of rocks by the lead method ---- 193-3

urkser, Ye. S., Yeliseyeva, G. D., Lechekhlev, V. R., and Shcherbak, M. P. Migration of lead in monazite and pitchblende ---- 199-1

urlatskaya, S. P. Ancient magnetic field of the earth ---- 198-255

— Archeomagnetic evidence for the Earth's magnetic field near Tiflis during the past ---- 201-249

urlatskaya, S. P., and Petrova, G. N. Change of the Earth's magnetic field in the past as revealed by archeomagnetic, paleomagnetic and observatory data ---- 200-259

— Restoration of the past secular variations of the geomagnetic field by the archeomagnetic method ---- 198-256

urns, E. A. See Lyon, R. J. P.

urša, Milan. Determination of the dimensions of the earth ellipsoid from the mean anomalies of curvature of the quasigeoid ---- 200-185

— Determination of the parameters of the reference ellipsoid suitable for the European geodetic networks from the astronomic-geodetic data of the International Association of Geodesy catalog ---- 203-165

urtsev, D. N. Basic instructions for the solution of procedural problems in surveying coal deposits ---- 200-164

urwash, R. A., and Baadsgaard, Halfdan. Yellowknife-Nonacho age and structural relations ---- 200-18

usch, Noel. Two minutes to noon ---- 198-60

uschendorf, F., Nielsen, Heims, Puchelt, H., and Ricke, W. Sulfur isotope investigations on the Meggen-Lenne pyrite-sphalerite-barite deposit (Germany) and on various Devonian evaporites ---- 201-240

ushee, Jonathan, Holden, John, Geyer, Barbara, and Gastil, Gordon. Lead-alpha dates for some basement rocks of southwestern California ---- 202-9

utakov, G. S. On the direct reduction of measurements of the acceleration of gravity ---- 199-152

utkevich, A. V. An application of the Taylor series with a mean argument for interpolation, numerical integration, and summation of some functions ---- 195-128

utler, C. P. The Goose Lake fragments ---- 202-31

utler, C. P., and Jenkins, R. J. Thermal properties of meteoritic iron from -150° Celsius ---- 196-37

utler, W. A., Jeffery, P. M., Reynolds, J. H., and Wasserburg, G. J. Isotopic variations in terrestrial xenon ---- 202-200

tovskaya, Ye. M., and Kon'kov, A. T. Seismicity of the Fergana valley and Tashkent ---- 192-72

Abstract

Butovskaya, Ye. M., and Ulomov, V. I. Traveltime curves of seismic waves and some features of crustal structure in central Asia according to the data of records of large explosions -------- 194-351
Buyalov, N. I. On the methodology of prospecting and investigating petroleum and natural gas deposits -------- 192-153
Byerly, P. Edward. See Case, J. E.
Byers, A. R. Major faults in western part of Canadian Shield with special reference to Saskatchewan -------- 199-145
Bylinskiy, Ye. N. Calculation of recent tectonic movements by study of river valleys -------- 197-186
Byrne, J. W. See Osterberg, Charles.
Byrnev, P. Kh. See Nedyalkov, I. P.
Bystritskiy, A. A. Nomograms for calculating the remanent magnetization and magnetic susceptibility of specimens of rocks and ores -------- 197-265
—— On the dimensions of the effective part of the plane table of the method of mean gradient -------- 195-111
Bystrov, N. F. See Potter, Kh. I.
Byus, Ye. I., Lebedeva, T. M., Levitskaya, A. Ya., and Tskhakaya, A. D. Seismicity of the Caucasus -------- 192-63

C

Cagniard, Louis. Analysis of the internal electrical constitution of the Earth -------- 193-257
See also Queille-Lefèvre, Colette.
Cahen, Lucien. Ancient glaciations and drift of the continents -------- 201-190
See also Monteyne-Poulaert, G.
Cahill, L. J., and Amazeen, P. G. The boundary of the geomagnetic field -------- 198-220
See also Freeman, J. W.
Cain, J. C., and Neilon, J. R. Automatic mapping of the geomagnetic field -------- 203-262
Cain, J. C., Shapiro, I. R., Stolarik, J. D., and Heppner, J. P. Vanguard 3 magnetic-field observations -------- 194-253
See also Heppner, J. P.
Callow, W. J., Baker, M. J., and Pritchard, D. H. National Physical Laboratory radiocarbon measurements I -------- 203-23
Caloi, Pietro. On the free oscillations of the Earth and of its outer shell -------- 199-67
—— On the velocity of propagation of longitudinal waves at the base of the Earth's mantle -------- 199-201
—— The effect of firmo-viscosity on the resultant of the movement associated with Rayleigh waves -------- 196-158
Calvin, Melvin, and Vaughn, S. K. Extraterrestrial life: some organic constituents of meteorites and their significance for possible extraterrestrial biological evolution -------- 193-46
Cambey, L. A. See Barber, R. C.
Cameron, A. G W. Birth of the elements -------- 203-62
—— Formation of the solar nebula -------- 197-31
—— The formation of the sun and planets -------- 192-12
—— The origin of atmospheric xenon -------- 197-52
Cameron, W. M. Geophysics at sea -------- 200-356
Cameron, W. S. See O'Keefe, J. A.
Campbell, Esma. See Gottfried, David.
Campbell, F. A. Age of mineralization at Quemont and Horne mines -------- 196-9
Canada Geological Survey. Aeromagnetic map of British Columbia - 203-296
—— Aeromagnetic maps of Manitoba -------- 203-294
—— Aeromagnetic maps of Northwest Territories -------- 203-297

Abstract

nada Geological Survey. Aeromagnetic maps of Nova Scotia ----- 203-290
— Aeromagnetic maps of Ontario ----- 203-293
— Aeromagnetic maps of Ontario-Quebec ----- 203-292
— Aeromagnetic maps of Quebec ----- 203-291
— Aeromagnetic maps of Saskatchewan ----- 203-295
— Aeromagnetic maps of Yukon Territory ----- 203-298
ner, B., and Perry-Whittingham, A. Record of observations at Victoria Magnetic Observatory for 1959 ----- 195-246
ner, B., and Whitham, K. A semiautomatic magnetogram reader ----- 194-243
nnon, J. R. See Nettleton, L. L., and Roy, Amalendu.
nnon, R. S., Jr., Buck, K. L., and Pierce, A. P. Sampling a zoned galena crystal for lead isotope study ----- 198-211
nnon, R. S., Jr., Pierce, A. P., and Antweiler, J. C. The data of lead isotope geology related to problems of ore genesis -- 199-206
nnon, R. S., Jr., Pierce, A. P., Antweiler, J. C., and Buck, K. L. Lead-isotope studies in the Northern Rockies, U. S. A ---- 196-271
pellen, J. See Svec, H. J.
puto, Michele. Deformation of a model of the Earth caused by axisymmetric mass ----- 192-189
— Elastodynamics and elastostatics of a model of the Earth, and its free toroidal oscillations ----- 194-107
— Elastostatics of a stratified sphere and its deformations caused by superficial masses ----- 193-109
— Free modes of layered oblate planets ----- 196-141
— Gravity in space and the dimensions and mass of the Earth ----- 202-147
— The free torsional oscillations of the Earth ----- 192-94
puto, Michele, Harrison, J. C., von Huene, Roland, and Helfer, M. D. Accuracy of gravity measurements off the coast of southern California ----- 200-211
rder, B., Hefferman, J., and Barnes, D. F. Technical photography of surface motion ----- 195-96
rder, D. S. Ground effects from the GNOME and Logan explosions ----- 195-100
— The GNOME symposium--foreward ----- 195-94
rder, D. S., Cloud, W. K., Mickey, W. V., Jordan, J. N., and Gordon, D. W. Seismic waves from an underground explosion in a salt bed ----- 194-121
ee also Rommey, Carl.
rdús, J. O. Note concerning solar, geomagnetic, and ionospheric activity (April-June, 1960) ----- 192-264
— Note concerning solar, geomagnetic, and ionospheric activity (July-September, 1960) ----- 192-265
— Note concerning solar, geomagnetic, and ionospheric activity (July-September, 1961) ----- 200-253
rey, S. W. Scale of geotectonic phenomena ----- 193-176
— The asymmetry of the Earth. Pt. 1 and Pt. 2 ----- 203-173
rlson, J. E., and Mabey, D. R. Gravity and aeromagnetic maps of the Ely area, White Pine County, Nevada ----- 200-210
rlson, R. H. High-explosive ditching from linear charges ----- 201-115
rmichael, C. M. The magnetization of solid solutions of ilmenite in hematite ----- 197-263
roubalos, Constantin. Study of the Sun-Earth transit time of geomagnetic perturbations ----- 195-259
rpenter, D. L. Whistler measurements of electron density and magnetic field strength in the remote magnetosphere ----- 201-248
ee also Helliwell, R. A.
rr, R. E., and Kovach, R. L. Toroidal oscillations of the Moon- 192-35
rroll, R. D., and Dickey, D. D. Seismic determination of elastic constants of rock salt, Gnome drift ----- 194-116

Abstract

Carrozzo, M. T. Comparison between the Peters and Baranov methods of calculation for the analytical upward and downward extension of gravity 197-191

Carter, G. S., and King, A. J. Geochemical and geophysical investigations at Mpanda 192-147

Carter, R. M. Simultaneous measurements by towed and inboard scintillographs in airborne surveying 192-317

Carter, R. M., and Matter, J. Problems of navigation and position plotting in airborne geophysical surveys 192-163

Cartwright, D. E. A proposed method, due to J. Crease, of levelling between France and England 194-181

Case, J. E., Joesting, H. R., and Byerly, P. E. Regional geophysical investigations in the La Sal Mountains area, Utah and Colorado 197-205

See also Joesting, H. R.

Casertano, Lorenzo. Volcanism in Chile. General features and survey of the volcanic activity in the last centuries 197-352

See also Segerstrom, Kenneth.

Caulfield, D. D. Predicting sonic pulse shapes of underwater spark discharges 198-328

Cavallaro, Carmelo. The explosion of Stromboli in July 1959 202-341

Cecchetii, André. See Drigo, Angelo.

Cech, R. E. Metallography of the Washington County meteorite 194-38

Centre National da la Recherche Scientifique. Geological and geophysical oceanography of the western Mediterranean 193-352

Ceplecha, Zd. Preliminary notes on some results of photographic multiple meteorite fall of Příbram 201-29

Cermák, Vladimir. The surface distribution of gamma-ray intensity from a source with a variable density of the radioactive substance 198-287

Cervenjak, Z., Ferrara, Giorgio, and Tongiorgi, Ezio. Age determinaion of some Yugoslav granites and granodiorites by the rubidium/strontium method 199-19

Červený, Vlastislav. On the position of the maximum of the amplitude curves of reflected waves 192-107

Chaigneau, Marcel. On the volcanic gases of Etna (Sicily) 196-355

Chakravarty, P. K. See Roberts, A.

Chamalaun, F. H. and Creer, K. M. A revised Devonian pole for Britain 199-243

Chamo, S. Deep structure of the eastern margin of the South Caspian basin according to refraction correlation data 200-340

Chan, Lu-So. Determination of the resistivity of the subsoil in the Tihany Peninsula, Lake Balaton, from recordings of magnetic pulsations and telluric variations 192-44

Chandler, E. J. See Andreasen, G. E., Bromery, R. W., and Henderson, J. R., Jr.

Chandler, J. B., Kinningham, Russell, and Massey, D. S. Texas bio-nuclear radiocarbon measurements I 203-25

Chandler, T. R. D. See Darnley, A. G.

Chang, Wen-Yu. On the mechanism of block-faulting of the Chinese craton 201-189

Chang, Y. H. The report of the magnetic prospecting on the Pochon nickel deposit and the Kapyong nickel deposit 200-301

Chao, E. C. T. Meteorite impact, an astrogeologic phenomenon 202-44

See also Shoemaker, E. M.

Chapman, D. R., and Larson, H. K. On the lunar origin of tektites 202-37

Chapman, E. P., Jr. Geophysical surveys compared to known ore zones of Craigmont deposits 192-143

Chapman, Sydney. Geomagnetic nomenclature 197-235

See also Akasofu, S. I., and Bartels, Julius.

Abstract

aralambus, S., and Goebel, K. Tritium and argon^{39} in the Bruderheim meteorite 194-45

ase, J. W., Schnetzler, C. C., Czamanske, G. K., and Winchester, J. W. The lanthanum, europium, and dystprosium contents of two tektites 195-23

atterjee, J. S. Some comments on the paper by A. T. Price, "Magnetic disturbance and the earth's main field" 193-265

auveau, Jean. Compensating filtering of the propagation of a seismic signal 200-325

— Contribution to the study of the deformation of the seismic signal. Analogies. Corresponding filtering 196-324

— Electro- and magnetoseismic-effects 203-321

ee also Bois, Pierre.

aykin, S. I. Procedure for prospecting and exploring the rich iron ore deposits of the Kursk Magnetic Anomaly 200-155

eatham, J. B., Jr. See Paslay, P. R.

ebanenko, I. I. On planetary fractures (lineaments) of the lithosphere 196-215

echel', I. I. See Malinovskaya, L. N.

ekunov, A. V. Stage-setting and initial moments of development of the Azov-Kuban basin 199-341

ee also Sollogub, V. B.

emekov, Yu. F. Neotectonics of the Far East of the USSR 195-173

erdyntsev, V. V., Kazachevskiy, I. V., and Kuz'mina, Ye. A. Isotopic composition of uranium and thorium in the zone of hypergenesis. Investigations of fossil bones, soils and mollusk shells 200-27

erdyntsev, V. V., and Mikhaylov, V. F. A primordial transuranium isotope in nature 198-212

erdyntsev, V. V., Orlov, D. P., Isabayev, Ye. A., and Ivanov, V. I. Uranium isotopes under natural conditions -- II. Isotopic composition of uranium minerals 195-232

ereau, J. Y. Conditions of use of gravimetry in petroleum exploration 195-192

— Statistical examinations of interpretation in aeromagnetic surveying 199-249

eredeyev, I. V. See Kirichek, M. A.

eremenskiy, G. A. Geothermal measurements in boreholes in Kotselvaara 202-165

— On the determination of the time of reestablishment of a thermal regime disturbed by drilling 203-217

— On the problem of the treatment of data of thermal observation 203-216

— The effect of permafrost on thermal conditions in the Mesozoic formations of the Berezovo region 195-210

ernyavskiy, G. A., and Gugunava, G. Ye. Magnetotelluric sounding in Georgia 200-78

ee also Anishchenko, G. N.

ernysh, A. P. See Ivanova, I. K.

erry, R. D. The determination of thorium and uranium in geological samples by an alpha-counting technique 197-310

— Thorium and uranium contents of australites 193-49

esnokova, T. S., and Grushinskiy, N. P. Gravimetric measurements in the Greenland Sea made in 1956 on the diesel-electric ship "Ob" 199-169

essex, Ronald. See Buchs, Armand.

etayev, D. N. New method of solving the fundamental problem of the theory of electromagnetic dipole sounding 193-136

ichinadze, V. K. See Murusidze, G. Ya.

ichinin, I. S. Theory of installations of combined grouping of seismic receivers 198-321

Abstract

Childs, O. E., and Beebe, B. W., eds. Backbone of the Americas-Tectonic history from pole to pole. A symposium ---- 201-180
Chinzei, Kiyotaka. See Sugimura, Arata.
Chirkov, A. M. See Shteynberg, G. S.
Chirvinskaya, M. V. See Andreyeva, R. I.
Ch'iu, H. T. Results of a seismic survey of the Ta-an anticline, Taichung, and their interpretation ---- 203-324
Chombart, L. G. Geophysical logging investigations of carbonate reservoirs ---- 198-127
Choubert, Georges, and Faure-Muret, Anne. The Agadir earthquake, its effect and its geologic interpretation ---- 198-58
Choudhury, Mansur. See Beaufils, Yvonne.
Chow, T. J., and Patterson, C. C. Correction ---- 194-236
—— On primordial lead in the Canyon Diablo meteorite ---- 196-33
Chowdhury, D. K., and Dehlinger, Peter. Elastic wave propagation along layers in two-dimensional models ---- 198-92
Chrest, S. A. See Soberman, R. K.
Christoph, Eberhard. Geoelectric and geomagnetic investigations southwest of Geyer (Erzgebirge) ---- 199-99
Christophe-Glaume, Jeannine. Reinforcement of intensity of the green oxygen ray connected with sudden commencements of magnetic storms ---- 198-244
Christopher, G. See Balakrishna, S.
Christopherson, Edmund. The night the mountain fell - The story of the Montana-Yellowstone Earthquake ---- 193-64
Christoskov, Ludmil. See Holub, Karel.
Chujo, Junsuke. Tokyo submarine canyon explored by the sonic prospecting ---- 198-355
Chumprunova, O. V. See Ogorodnik, I. P.
Chuprov, K. S. See Yemelin, V. I.
Churchhouse, R. F. The age of the galaxy ---- 196-41
Chuyun, A. B. See Belomar, O. D.
Chzhao, Bin. See Gurvich, I. I.
Cicconi, Giuseppe. See Bossolasco, Mario.
Cisternas, Armando. See Ben-Menahem, Ari.
Clark, S. P., Jr. Geothermal studies ---- 192-237
—— Iron meteorites ---- 192-15
—— Temperatures in the continental crust ---- 201-217
Clarke, David. Technique of photographic determination of the heights of lunar mountains, with application to the region of Theophilus ---- 196-75
Clarke, R. S., Jr., and Henderson, E. P. Georgia tektites and related glasses ---- 196-57
Clay, C. S., and Liang, W. L. Continuous seismic profiling with matched filter detector ---- 194-304
Clayton, D. D. A calculation of the abundance of uranium and thorium from the primordial Pb^{206}/Pb^{207} ratio ---- 210-234
Clayton, R. N., and Mayeda, T. K. The use of bromine pentafluoride in the extraction of oxygen from oxides and silicates for isotopic analysis ---- 197-228
See also James, H. L.
Cleary, J. R., and Peaslee, D. C. Amplitude perturbations in Rayleigh waves ---- 194-83
Clerc, Gerard. See Aubert, Maurice.
Clifford, T. N., Nicolaysen, L. O., and Burger, A. J. Petrology and age of the pre-Otavi basement granite at Franzfontein, northern south-west Africa ---- 193-13
Cline, T. L. See Bryant, D. A.
Closs, Hans. Geophysical operations in the southern North Sea ---- 201-343

Abstract

loss, Hans. How wide is the field of geopgysics? 195-132
— Seismic experiments in the Dolomites (Lago Lagorai) to investigate the Earth's crust in the eastern Alpine area. I. Antecedent of the experiments "Lago Lagori 1961" 193-239
loss, Hans, and Behnke, C. Progress of the application of seismic methods in the investigation of the Earth's crust 193-243
loud, W. K. Period measurements of structures in Chile 197-89
See also Carder, D. S., Eppley, R. A., and Talley, H. C., Jr.
lough, R. W., and Jenschke, V. A. The effect of diagonal bracing on the earthquake performance of a steel frame building 197-91
See also Arias S., Arturo.
ast and Geodetic Survey. Magnetograms and hourly values, Sitka, Alaska, 1960 203-266
ats, R. R. Magma type and crustal structure in the Aleutian Arc 202-315
ertze, F. J., and Schumann, F. W. The basic portion and associated minerals of the Bushveld Igneous Complex north of Pilanesberg. Part IV. Geophysical investigation 200-296
ffman, M. L. Charging grains of dust 198-39
hen, A. J. Fossil meteorite craters 202-45
hen, H. A. Measurements of flux of small extra-terrestrial particles 193-39
hen, J., Creer, K. M., Pauthenet, Réne, and Srivastava, K. Magnetic properties of fine-grained antiferromagnetic substances 197-257
hen, T. J. Gravity survey of Chilean Antarctic bases 195-204
le, J. See Hemenway, C. L.
le, K. D. A note on partial criticisms of dynamo theory of magnetic disturbance 198-215
— Damping of magnetospheric motions by the ionosphere 200-248
leman, P. J., Jr. See Judge, D. L., and Smith, E. J.
leman, R. G. See Arnold, R. G.
lley, G. C. The detection of caves by gravity measurements 200-207
llin, A. E. Oceanography in the Canadian Arctic 197-351
llins, B. G., and Summer, C. J. An instrument for measuring vertical temperature profiles in small bore-holes 199-192
mpston, W. See McDougall, Ian., and Riley, G. H.
nnell, D. V. See Willmore, P. L.
nnes, J., Blum, P.-A., Jobert, Georges, and Jobert, Nelly. Observation of the free oscillations of the Earth 195-65
nnor, R. D. Concentration of natural and airborne activities near ground level at Winnipeg 203-305
nrad, Georges. See Beucher, Francçise.
nstantinescu, Liviu, and Botezatu, Radu. A practical procedure for the downward continuation of potential fields 199-165
nstantinescu, Liviu, and Enescu, Dumitru. Nature of faulting and stress pattern at the foci of some Carpathian-Arc-Bend earthquakes 193-82
nstantinescu, P., and Teodorescu, V. Seismic-reflection prospecting in the Balta Alba region 201-345
See also Paicu, Dumitru.
ok, A. F. A criterion for the mode of ablation of stone meteors 202-33
ok, A. H. A note on the geodetic use of gravity measurements 192-171
— Sources of harmonics of low order in the external gravity field of the Earth 201-196
ok, G. E. Geophysical results obtained from satellite orbits 193-185
— Perturbations of satellite orbits by tesseral harmonics in the Earth's gravitational potential 203-188
ok, J. C. Seismic reconnaissance on an ice-covered Antarctic Sea 201-353

Abstract

Cook, J. C. Supplementary gravity and magnetic data for McMurdo Sound and Victoria Land, Antarctica ---------- 200-223
Cook, K. L. The problem of the mantle-crust mix ---------- 199-200
Cook, K. L., Algermissen, S. T., and Costain, J. K. The status of PS converted waves in crustal studies ---------- 194-84
See also Stephenson, L. P.
Cook, M. A. Viscosity-depth profiles according to the Ree-Eyring viscosity relations ---------- 200-236
Cook, N. G. W. See Jaeger, J. C.
Cooper, J. A. See Webb, A. W.
Coppens, René. Radioactivity and structure ---------- 193-317
Coppens, René, and Stussi, J.-M. Variations in the activity of small radioactive crystals of rocks as a function of their dimensions ---------- 193-310
See also Roubault, Marcel.
Coppez, A. See Picciotto, E. E.
Corbeille, R. L. New Orleans barrier island ---------- 199-8
Corin, F. The carbonaceous aerolite of Essebi (Aru, Province Orientale) ---------- 202-32
Coron, Suzanne. See Baglietto, E. E.
Cosgrove, M. E. Boreholes in the Carboniferous rocks of the Ashover district, Derbyshire. Appendix B - Radioactivity logs of the boreholes ---------- 196-322
Costain, J. K. See Cook, K. L.
Coulomb, J. The pulsations of the Earth's magnetic field and of Earth currents ---------- 192-276
Cox, A. V., Doell, R. R., and Dalrymple, G. B. Geomagnetic polarity epochs and Pleistocene geochronometry ---------- 201-280
See also Doell, R. R.
Cox, D. E., Takei, W. J., and Shirane, G. A magnetic and neutron diffraction study of the Cr_2O_3-Fe_2O_3 system ---------- 199-235
Craig, Harmon, Gordon, L. I., and Horibe, Yoshio. Isotopic exchange effects in the evaporation of water ---------- 203-239
Crane, H. R., and Griffin, J. B. University of Michigan radiocarbon dates VIII ---------- 203-33
Crary, A. P., Robinson, E. S., Bennett, H. E., and Boyd, W. W., Jr. Glaciological studies of the Ross Ice Shelf, Antarctica, 1957-1960 ---------- 192-195
Crawford, A. R. Large ring structures in a South Australian Precambrian volcanic complex ---------- 200-176
Creasey, S. C., and Kistler, R. W. Age of some copper-bearing porphyries and other igneous rocks in southeastern Arizona ---------- 193-11
Cree Oil of Canada Limited. Longreach-Silsoe seismic survey, Queensland 1960 ---------- 202-291
Creer, K. M. Comment on "An analysis of the positions of the Earth's magnetic pole in the geological past" by F. H. Hibberd ---------- 196-291
—— Geomagnetic and palaeomagnetic evidence of fossil axes of rotation of the Earth ---------- 195-283
—— Palaeomagnetism of the Serra Geral formation ---------- 195-288
—— Some magnetic properties of finely divided ferric oxides and hydroxides ---------- 197-258
See also Chamalaun, F. H., and Cohen, J.
Cromie, W. J. Exploring the secrets of the sea ---------- 200-352
Cronk, Caspar. See Goldthwait, R. P.
Crookall, J. O. See Hill, C. R.
Crowe, Christopher. The thermal state of the Earth ---------- 194-218
Crowe, Christopher, Moench, A. F., and Taylor, P. T. Applications of cylindrical thermal probe theory to the determination of thermal constants ---------- 200-231

Abstract

owe, Christopher, and Redmond, J. C. Some effects of pressure on porosity, permeability and resistivity of sandstones ----- 200-346
owell, J. C. Displacements along the San Andreas fault, California ----- 195-148
owell, J. C., and Walter, J. W. R. Anorthosite and related rocks along the San Andreas fault, southern California ----- 195-149
llington, A. L. Geomagnetic effects of the solar eclipse, 12 October 1958, at Apia, Western Samoa ----- 195-251
iredale, R. G. See Parkinson, W. D.
irray, J. R. See Moore, D. G.
irrie, R. G., Grommé, C. S., and Verhoogen, J. Remanent magnetization of some Upper Cretaceous granitic plutons in the Sierra Nevada, California ----- 198-258
irtis, G. H. and Evernden J. F. Age basalt underlying Bed I, Olduvai ----- 201-11
itcliffe, J. L. See Hobbs, H. A.
ittitta, Frank. See Thorpe, A. N.
iypers, M., Duquesne, H., Germai, G., Govaerts, J., Gueben, G., and Michiels, J. Critical study of the method of radiocarbon dating with the aid of liquid scintillators ----- 196-5
ganik, S. A. See Jones, G. H. S.
amanske, G. K. See Chase, J. W.
ubek, J. A. Accuracy of determination of linear reserves of radioactive ores from gamma-ray logging ----- 197-317
— Accuracy of the thickness interpretation from the gamma-ray logs ----- 192-321
— Some problems of the theory and quantitative interpretation of the gamma-ray logs ----- 192-322
— The influence of the drilling fluid on the gamma-ray intensity in the borehole ----- 193-321
— The natural gamma-ray well logging for density logging purposes ----- 197-316

D

abrowski, Adam. History of geophysical studies in prospecting for salt deposits in Poland ----- 201-149
— The structure of the deep substratum in western Poland in the light of geophysical research data ----- 194-172
achille, Frank. Axis changes in the Earth from large meteorite collisions ----- 199-129
achille, Frank, Zeto, R. J., and Roy, Rustum. Coesite and stishovite: stepwise reversal transformations ----- 200-61
agelayskiy, V. B. Granites of the Murmansk-Iokan'gsk massif ----- 200-35
— Magmatic rocks of the Upper Katarchean in the region north of the Polmos and Poros formations ----- 200-32
— Tourmaline aplitic and pegmatitic granites ----- 200-38
See also Bondarenko, L. P.
akhnov, V. N. Determination of the porosity coefficient of reservoirs according to the data of the maximum points of laterolog curves ----- 198-119
— Geophysical well logging ----- 195-118
— Interpretation of the results of geophysical investigations of borehole sections, 2d ed ----- 194-153
— Use of geophysical methods of study of borehole sections in connection with calculating oil and gas reserves ----- 197-154
Albissin, Micheline, Fornaca-Rinaldi, Giuseppina, and Tongiorgi, Ezio. Modifications brought about in the thermoluminescence curves of calcareous rocks by orogenic pressure ----- 195-212

Abstract

Dalrymple, G. B. Potassium-argon dates of some Cenozoic volcanic rocks of the Sierra Nevada, California ---------- 200-14
See also Cox, A. V.
Dalseide, Helge. See Finch, H. F., and Gjellestad, Guro.
Damnjanović, Konstantin, and Petrović, J. N. Review of geophysical investigations in Srem ---------- 194-171
Damon, P. E., Long, Austin, and Sigalove, J. J. Arizona radiocarbon dates IV ---------- 203-36
See also Green, W. D., and Titley, S. R.
Dance, D. F. See Darnley, A. G.
Daneš, Z. F. On the possiblity of shear waves in the Earth's outer core ---------- 197-124
Daneš, Z. F., and Oncley, L. A. An analysis of some second derivative methods ---------- 195-185
See also Sloan, R. E.
Dangeard, Louis; Doré, Francis; and Rioult, Michel. Study of the Cambro-Silurian syncline covered by the Jurassic north of Caen (Calvados) ---------- 195-120
Daniels, R. B., Rubin, Meyer, and Simonson, G. H. Alluvial chronology of the Thompson Creek Watershed, Harrison County, Iowa ---------- 201-8
Danilevich, S. I. See Komlev, L. V.
Darbyshire, J. Microseisms ---------- 202-252
Darnley, A. G., Horne, J. E. T., Smith, G. H., Chandler, T. R. D., Dance, D. F., and Preece, E. R. Ages of some uranium and thorium minerals from east and central Africa ---------- 192-6
Darnley, A. G., Smith, G. H., Chandler, T. R. D., and Dance, D. F. The age of fergusonite from the Jos area, northern Nigeria ---------- 202-13
Darwin, G. H. The tides and kindred phenomena in the solar system ---------- 193-164
Das Gupta, S. C. On the phenomenon of singing in seismic experimental observation in the coastal water ---------- 195-318
See also Bhattacharya, J.
Dashkevich, N. N. See Faynberg, F. S.
Daughtry, A. C., Perry, D., and Williams, M. Magnesium isotopic distribution in dolomite ---------- 192-248
Dauvillier, Alexandre. On lunar magnetism ---------- 195-27
—— Paleogeomagnetism and evolution of the Earth-Moon system ---------- 197-33
Davidson, C. F. The Precambrian atmosphere ---------- 199-38
Davidyuk, L. A. See Burkser, Ye. S.
Davis, C. W., Miesch, A. T., Eicher, R. N., and Morris, E. C. Computer analysis of microphotometer data from lunar photographs ---------- 200-67
Davis, G. L., and Schreyer, Werner. Age determinations on rocks of the east Bavarian basement complex and their geologic significance ---------- 197-20
See also Aldrich, L. T., and Tilton, G. R.
Davis, Leverett, Jr. See Smith, E. J.
Davis, L. R. See Hoffmann, R. A.
Davis, T. M. See Alldredge, L. R.
Davis, T. N. Negative correlation between polar-cap visual aurora and magnetic activity ---------- 202-209
Davis, T. N., and Echols, Carol. A table of Alaskan earthquakes, 1788-1961 ---------- 194-68
Davis, W. D., and Mewherter, J. L. Abundance of U-236 in nature ---------- 194-235
Davison, W. C., ed. Geophysical exploration - 1960 ---------- 194-170
Davydov, V. F. On the problem of prospecting the iron ores in the Angara-Ilim region and adjacent areas of the Irkutsk district ---------- 195-303

Abstract

avydov, V. M. See Gladkiy, K. V.

avydova, N. I., Shvarts, Ya. B., and Yaroshevskaya, G. A. Wave pattern in deep seismic sounding on the Magadan-Kolyma profile ---------- 194-342

awson, J. B. The geology of Oldoinyo Lengai ---------- 202-335

ayev, D. S., Serdinov, A. I., and Tarkhov, A. G. Modeling of problems of the method of radio wave translucency ---------- 203-152

eans, T. See Hamilton, E. I.

ebrach, J. Preliminary report of the Survey of the Physics of the Globe and of Meteorology on the earthquake of February 29, 1960 at Agadir ---------- 198-56

Bremaecker, J. Cl., Sitton, G. A., Rusk, S. K., Graham, M. H., and Schutz, T. C. The Rice digital seismograph system---- 203-107

e Breuck, W., and De Moor, G. First results of electrical prospecting in the "Flemish Valley" ---------- 203-155

See also Gonfiantini, R.

ecker, R. W. Magnetic studies on Kilauea Iki lava lake, Hawaii -- 203-289

eevey, E. S., Jr., Nakasi, Noboyuki, and Stuiver, Minze. Fractionation of sulfur and carbon isotopes in a meromictic Lake ---- 200-243

See also Stuiver, Minze.

eFelice, J., Fireman, E. L., and Tilles, David. Tritium, argon 37, and manganese 54 radioactivities in a fragment of Sputnik 4 ---------- 203-304

eflandre, Georges. Critical remarks on the supposed presence of microorganisms of extraterrestrial origin in meteorites -------- 196-45

egens, E. T. See Kaplan, I. R.

Graaff-Hunter, James. Reduction of gravity by isostatic methods and by model Earth methods contrasted ---------- 192-205

ehlinger, Peter, and Yungul, S. H. Experimental determination of the reliability of the LaCoste and Romberg surface-ship gravity meter S-9 ---------- 192-215

See also Allan, T. D., Chowdhury, D. K., and Yungul, S. H.

eibert, D. H. Geophysical exploration in Sumatra ---------- 203-161

Jager, C. Age and origin of the solar system ---------- 193-20

elaplanche, J., and Ledoux, Y. Analysis of field seismograms and their comparison with synthetic seismograms ---------- 202-286

elattre, Ch. See Bolfa, Joseph.

elbos, Leon. See Bellair, Pierre.

eleon, Gavrilo; Gojkovíc, Slaviša; and Vukasovíc, Momčilo. Determination of the absolute geologic age of some granites in Yugoslavia ---------- 195-12

elevaux, M. H. Lead reference sample for isotopic abundance ratios ---------- 201-233

elhal, J. See Ledent, D.

elibrias, Georgette, Perquis, M.-T., and Ros, Joaquin. Rate of deposition of the marine muds in the Bay of Villefranche-sur-Mer by the C-14 method ---------- 194-14

See also Pelletier, Henri.

elwiche, R. See Monteyne-Poulaert, G.

ement'yev, L. F., Bad'yanov, V. A., and Azamatov, V. I. Investigation of the relationship of natural potentials to porosity and permeability ---------- 195-114

emidenko, S. G. See Burkser, Ye. S., and Semenenko, N. P.

emidenko, Yu. B. Combined use of MOV and KMPV for solving regional problems and for detailed study of the structure of the Dnieper-Donets basin ---------- 198-339

emidenko, Yu. B., and Manyuta, M. G. Regional seismic investigations in the northwest part of the Dnieper-Donets basin along the profile Yagotin-Baturin ---------- 202-288

Abstract

Demidenko, Yu. B., and Puzdrovskiy, Ye. P. Detailed seismic survey of the salt domes of the Dnieper-Donets basin ---- 199-343
Demidneko, Yu. B., and Zel'tsman, P. A. A three-component borehole geophone ---- 199-336
Demin, D. V. See Plekhanov, G. F.
Demitrov, L., and Petkov, I. N. Experience in clarifying the relief of the andesite basement in the Burgas andesite basin according to data of gravity and seismic investigations ---- 198-337
De Moor, G. See De Breuck, W.
Dempsey, W. J. A brief review of airborne geophysical surveying techniques and applications ---- 193-161
Dempsey, W. J., Fackler, W. D., and others. Aeromagnetic map of the Dragoon quadrangle, Cochise County, Arizona ---- 202-247
— Aeromagnetic maps of Arizona ---- 202-248
Dempsey, W. J., and Gilbert, F. P. Aeromagnetic map of Melbourne and vicinity, Brevard County, Florida ---- 202-238
Dempsey, W. J., Hill, M. E., and others. Aeromagnetic maps of Arizona ---- 202-244
Dempsey, W. J., Long, Carl, and others. Aeromagnetic map of parts of southern Mora, northern San Miguel, and western Harding Counties, New Mexico ---- 200-294
Dempsey, W. J., Page, Ernest, and others. Aeromagnetic map of parts of Colfax, northern Mora, and western Harding Counties, New Mexico ---- 200-293
Dempsey, W. J., Petrafeso, F. A., and others. Aeromagnetic map of the central part of San Miguel County, New Mexico ---- 201-305
Dempsey, W. J., Stuart, D. J., and others. Aeromagnetic map of the northwestern part of the Wind River Indian Reservation, Wyoming ---- 202-243
See also Andreasen, G. E.
Dem'yanovskaya, Ye. I. On the use of induced potentials in the study of the quality of coals of the Lvov-Volyn basin ---- 193-142
— Use of radioactivity logging methods in the study of coal formations (Exemplified by the Lvov-Volyn coal basin) ---- 195-313
Den, Nozomu. A review of marine seismological research and an interpretation of crustal structure under the ocean ---- 201-226
See also Matuzawa, Takeo.
Denison, R. E., and Muehlberger, W. R. Buried granite in Mississippi ---- 202-6
Dennison, A. T. Discussion on "Seismic receptors," by H. R. Prescott ---- 201-326
— Geophysical aspects ---- 199-307
— On the problem of techniques of constructing synthetic seismograms ---- 202-281
DeNoyer, John, and Pollack, Henry. Measurements of the velocity of crack propagation in glass plates ---- 196-162
Denozière, P., Hirtz, J. M., Astier, J. L., Millot, Georges, and Simler, L. Hydrogeologic study by electrical prospecting of the alluvial fan of the Andlau (neighborhood of Andlau, Bas-Rhin) ---- 196-187
de Oliveira, Geraldo. Determination of the constants V_0 and K of the linear law $V=V_0^a+KZ$ by means of the average velocity V_a ---- 203-313
Deprit, Andre. The Moon, our neighbor ---- 195-29
d'Erceville, I., and Kunetz, Gésa. On the effect of a piling-up of thin layers in seismic surveying ---- 202-269
— Reply to the discussion by J. T. Weaver ---- 201-61
— The effect of a fault on the Earth's natural electromagnetic field ---- 195-105
See also Kunetz, Gésa.
Deresiewicz, H. On the transmission of thermoelastic plane waves across a plane boundary ---- 196-153

Abstract

Deresiewicz, H., and Škalak, R. On uniqueness in dynamic poroelasticity ---- 203-137

Dergachev, N. I. Determination of the optimal radius of the area to be taken into account in the topographic correction in gravimetric surveying ---- 193-205

Dergachev, N. N. Template for calculating the topographic correction in the course of conducting gravimetric surveys ---- 193-208

Derkachev, A. A. A method of calculating the seismic effect by use of standard accelerograms ---- 203-90

Derpgol'ts, V. F. Main planetary sources of the natural waters of the Earth ---- 196-267

Derruau, M. M. Studies on some explosive Japanese volcanoes ---- 196-356

De Sa, A., and Molyneux, L. A spinner magnetometer ---- 200-280

Desai, U. D. See Bryant, D. A.

Desaint, R., and Richard, H. Evolution of surface geophysical activity (petroleum) ---- 202-104

De Santis, L. A simple method for measuring the natural radioactivity of the air ---- 203-307

Despois, Jacques, Sanselme, Henri, and Vialette, Yves. Viséan granitization in the northeastern Massif Central ---- 199-17

Dessau, G., Jensen, M. L., and Nakai, Nobuyuki. Geology and isotopic studies of Sicilian sulfur deposits ---- 194-231

Dessler, A. J. Further comments on stability of interface between solar wind and geomagnetic field ---- 193-259

Dessler, A. J., and Fejer, J. A. Interpretation of Kp index and M-region geomagnetic storms ---- 202-222

Deutsch, E. R. Discussion: Polar wandering - A phantom event? - 197-271

Deutsch, Sarah. See Silver, L. T.

Devadas, P. The origin of lunar rays ---- 196-96

Devirts, A. L. See Neyshtadt, M. I., Serebryannyy, L. R., and Vinogradov, A. P.

de Visintini, G. See Behnke, Cl.

deVuyst, A. The variation of magnetic declination in Belgium from 1828 to 1960.5 ---- 192-263

—— Values of the terrestrial magnetic field in Belgium from 1955 to 1961 ---- 196-280

deVuyst, A., and Simon, G. General trend of the distribution of the geomagnetic field in Belgium for epoch 1960.5 ---- 203-268

Devyatkin, Ye. V. Fundamental problems of the recent tectonics of the southeastern Altay ---- 202-140

Dewart, Gilbert. See Press, Frank.

DeWitt, C., Hieblot, James, and Lebeau, André, eds. Geophysics. The Earth's environment ---- 203-247

Deyev, L. L., and Sen'ko-Bulatnyy, I. N. A single-channel differential gamma-spectrometer on a three-strand cable ---- 201-325

See also Bulashevich, Yu. P.

Dibblee, T. W., Jr. Displacements on the San Andreas rift zone and related structures in Carrizo Plain and vicinity ---- 197-183

Dicke, R. H. The Earth and cosmology ---- 193-187

Dicke, R. H., Hoffmann, W. F., and Krotkov, R. Tracking and orbit requirements for experiment to detect variations in gravitational constant ---- 193-188

See also Peebles, J.

Dickey, D. D. See Carroll, R. D.

Dickson, G. O. The origin of small, randomly directed magnetic moments in demagnetized rocks ---- 193-287

Die Umschau. The origin of the planetary system ---- 192-13

Dietz, R. S. Alpine serpentines as oceanic rind fragments ---- 202-173

—— Collapsing continental rises: An actualistic concept of geosynclines and mountain building ---- 200-187

Abstract

Dietz, R. S. Ocean-basin evolution by sea-floor spreading -------- 202-120

Di Filippo, Domenico, and Peronaci, Francesco. Physical nature of the shock at the focus of some deep earthquakes in the Mediterranean -------- 192-89

—— Structure of the Earth's crust in the Lombardy-Venetian Pre-Alps as a result of the study of the Garda earthquake of February 19, 1960 -------- 193-245

Digiesi, Domenico. Results obtained in the first operations for comparison and field use of the Askania magnetometers recently acquired by the Istituto Geografico Militare -------- 192-301

Dikenshteyn, G. Ye. Regional investigations as the basis of the achievement of the greatest efficiency of geologic exploratory operations (exemplified by Central Asia) -------- 200-157

Dikgof, Yu. A. See Yakovlev, G. Ye.

Dinger, J. E. Comparison of ocean-wave and microseism spectrums as recorded at Barbados, West Indies -------- 200-302

Dix, C. H. Cagniard's method and associated numerical techniques -------- 197-109

—— The seismic head pulse -------- 193-108

Dizer, Muammer. Influence of sunspot activity on the geomagnetic activity in the northern and southern hemispheres -------- 200-273

—— Sudden disappearance of filaments and geomagnetic activity ---- 197-248

Dmitriyev, A. V. See Balyasnyy, N. D., and Boltneva, L. I.

Dmitriyev, V. I. Solution of the basic problem of the theory of the induction method of electric prospecting -------- 194-122

Dobkina, E. I. See Neyshtadt, M. I., and Vinogradov, A. P.

Dobrin, M. B., and Ward, S. H. Tools for tomorrow's geophysics- 196-202

Dobrokhotov, Yu. S. The gravity polygon and ties with base points in Leningrad -------- 201-212

Dobrokhotov, Yu. S. Belikov, B. D., Kramer, M. V., and Pertsev, B. P. Observations of tidal variations of the acceleration of gravity at Pulkovo in 1958 -------- 201-92

Dobrokhotov, Yu. S., Ivanova, M. V., and Shcheglov, S. N. The gravimetric polygon at Moscow State University -------- 201-97

See also Pariyskiy, N. N.

Dobrokhotova, I. A., and Pyatnitskiy, V. I. On the necessity for taking into account the method of generating the field and the effect of the surrounding medium in the low-frequency inductive method of geophysical surveying -------- 198-104

Dobrov, T. B. Laboratory application of regulated directional reception (RDR) for seismic refraction work -------- 197-331

Dobrovol'skiy, V. P. See Ananyan, A. A.

Dobrynin, V. M. Effect of overburden pressure on some properties of sandstones -------- 195-136

See also Glumov, I. F.

Dobrzycka, Maria. Observations of tidal gravity variations at Borowiec -------- 197-106

Dodson, M. H., and Long, L. E. Age of Lundy Granite, Bristol Channel -------- 196-15

See also Hamilton, E. I.

Doe, B. R., and Hart, S. R. The effect of contact metamorphism on lead in potassium feldspars near the Eldora stock, Colorado-- 200-238

See Aldrich, L. T.

Doell, R. R. Seismic depth study of the Salmon Glacier, British Columbia -------- 197-340

Doell, R. R., and Cox, A. V. Determination of the magnetic polarity of rock samples in the field -------- 193-291

—— The accuracy of the paleomagnetic method as evaluated from historic Hawaiian lava flows -------- 198-257

See also Cox, A. V.

Abstract

Dohr, Gerhard. Investigations of the structure of the Earth's crust in West Germany by seismic reflection methods ---------------- 193-244

Dole, S. H. Reply by author [Discussion by R. B. Southworth]----- 202-34

—— The gravitational concentration of particles in space near the Earth-- 200-62

Dolginov, S. Sh., Yeroshenko, Ye. G., Zhuzgov, L. N., and Pushkov, N. V. Investigation of the magnetic field of the Moon-- 195-26

—— Magnetic measurements aboard the Venus automatic interplanetary station -- 203-270

Dolginov, S. Sh., Yeroshenko, Ye. G., Zhuzgov, L. N., Puskhov, N. V., and Tyurmina, L. O. Measuring the magnetic fields of the Earth and the Moon by means of Sputnik III and Space Rockets I and II --- 192-254

Dolginov, S. Sh., Zhuzgov, L. N., and Pushkov, N. V. Preliminary report of geomagnetic measurements on the third Soviet artificial Earth satellite ------------------------------------ 193-267

Doll, H. G., Dumanoir, J. L., and Martin, Maurice. Improvement of the combination of electrical methods of investigating well sections and their interpretation ------------------------ 198-126

Dollfus, Audouin. Nature of the surface of the planets and of the Moon --- 195-28

Dombai, Tibor. Lorand Eötvös, the geophysicist---------------- 198-146

Donabedov, A. T., Korovina, T. L., and Timarev, K. V. Study of the structure of the Earth's crust on the east coast of the Caspian Sea by the method of deep seismic sounding------------------- 194-348

Donchenko, K. B. Geologically based use of electrical surveying methods in the prospecting of potash salts in the cis-Carpathian - 199-100

Doodson, A. T. Mean sea level and geodesy -------------------- 194-180

Dore, Francis. See Dangeard, Louis.

Dorman, James, and Ewing, Maurice. Numerical inversion of seismic surface wave dispersion data and crust-mantle structure in the New York-Pennsylvania area ------------------------- 194-220

See also Brune, J. N.

Dorman, L. I. Cosmic rays and geomagnetism - A review -------- 198-219

Dorman, L. I., and Kolomeyets, Ye. V. The presence of the effect of "small" cosmic-ray bursts on magnetically disturbed days --- 203-259

Dorman, L. I., and Koyava, V. K. Effects of magnetic storms on cosmic rays at minimum solar activity ---------------------- 201-267

Dortman, N. B., and Ozerskoy, M. L., eds. Methodological handbook for determining the physical properties of rocks and useful minerals -- 198-143

Doskach, A. G. Fundamental features of the recent tectonics of the Turgay downwarp -- 195-167

Dougherty, J. P. Some comments on dynamo theory ------------ 199-216

Douglass, J. L. See Srivastava, S. P.

Doyle, H. A., and Webb, J. P. Traveltimes to Australian station from Pacific nuclear explosions in 1958 ---------------------- 197-127

Drake, C. L. See Ludwig, W. J.

Drigo, Angelo, Cecchetti, André, and Fratucello, G. Measurement of the thickness of the snow mantle at Fedaia (Marmolada) carried out in 1958-59 with the method of the absorption of the gamma rays-- 196-312

Drofa, V. K. See Gorynya, A. A.

Droste, Zofia, and Hordejuk, Józef. Rigorous method of determining the frequency characteristic U_1 for $\sigma^2>0$----------------- 197-104

See also Bóbr-Modrakowa, Irena.

Drozdov, S. V. A basis for deriving latitude variations from observations of zenith program stars -------------------------- 203-120

Abstract

Druzhinin, A. V. Relationship between geothermal regimen of the sedimentary cover and the structure of the crystalline basement - 200-228

Drynkin, V. I. See Leypunskaya, D. I.

Dubar', G. P. Attempt at combined use of absolute age data and mineralogic analysis for solving problems of paleogeography (exemplified by the Lena basin) ---------- 196-26

Dubin, Maurice. IGY micrometeorite measurements ---------- 193-43

Dubin, Maurice, Alexander, W. M., and Berg, O. E. Cosmic dust showers by direct measurements ---------- 201-41

Dubin, Maurice, and McCracken, C. W. Measurements of the distribution of interplanetary dust ---------- 196-49

DuBois, P. M. Palaeomagnetism and correlation of Keweenawan rocks ---------- 198-259

DuBois, R. L. Remanent, induced, and total magnetism of a suite of serpentine specimens from the Sierra Nevada, California ---------- 194-275

—— Reply [Comments by R. F. King] ---------- 202-223

Dubourdieu, Georges. The lesson of the Agadir earthquake ---------- 199-60

Dubrovskiy, V. G. Rapid geoelectric and geomagnetic variations and their regularities observed at Ashkhabad ---------- 194-256

Dubrovskiy, V. G., Kuliyeva, R. N., and Nepesov, K. Solar diurnal variations of the Earth's electromagnetic field from observations at Ashkhabad ---------- 199-53

Duckworth, H. E. See Barber, R. C.

Ducrot, Jean. See Muraour, Pierre.

Duda, S. I. Phenomenological investigation of an aftershock sequency from the Aleutian Island region ---------- 194-77

Duda, S. J., and Båth, Markus. Strain release in the circum-Pacific belt: Kern County 1952, Desert Hot Springs 1948, San Francisco 1957 ---------- 203-77

Duesterhoeft, W. C., Hartline, R. E., and Thomsen, H. S. The effect of coil design on the performance of the induction log ---------- 193-141

Duffus, H. J., Kinnear, J. K., Shand, J. A., and Wright, C. S. Spatial variations in geomagnetic micropulsations ---------- 192-275

DuFresne, E. R., and Anders, Edward. On the chemical evolution of the carbonaceous chondrites ---------- 194-37

—— On the retention of primordial noble gases in the Peysanoe ---------- 194-29

—— The record in the meteorites -- V. A thermometer mineral in the Mighei carbonaceous chondrite ---------- 192-23

Duganov, G. V., and Kukharev, V. N. Geothermal investigations of the Kadiyev region of the Donets Basin ---------- 193-237

Duke, C. M., and Leeds, D. J. Response of soils, foundations, and Earth structures to the Chilean earthquakes of 1960 ---------- 197-88

Dunkin, J. W. A study of two-dimensional head waves in fluid and solid systems ---------- 203-129

Dumanoir, J. L. See Doll, H. G.

Dumanowski, B., Jahn, A., and Szczepankiewicz, S. The Holocene of Lower Silesia in the light of results of the first radiocarbon dating ---------- 192-9

Dumitrashko, N. V., Milanovskiy, Ye. Ye., and Khain, V. Ye. Recent tectonics of the Caucasus ---------- 195-174

Dumitru, Stelian. Detailed gravimetric investigation in the region of the east of the Rumanian Plain between Ţăndărei and the Danube ---------- 200-216

Dunford, H. B. See Thode, H. G.

Dungey, J. W. Interactions of solar plasma with the geomagnetic field ---------- 202-212

Duquesne, H., Govaerts, J., Gueben, G., and Putzeys, J. V. Research on liquid scintillators utilized for measurement of soft beta rays ---------- 196-315

See also Cuypers, M.

Abstract

Durand, G., and Jurain, Georges. Age of uraniferous minerals of the southern Vosages --- 194-16
Durand, G. L. A. Age determination of a pitchblende of Turkish Dikmen (Muğla Province) --- 194-17
— Determination of the age of the uranium mineralizations of the Chardon mine (Vendee) --- 196-16
— Importance of the screen effect in the study of natural radioactive minerals by γ-spectrometry --- 199-203
Durand, G. L. A., and Sanselme, Henri. Ages of the Chameane pitchblende (Puy-de-Dôme) --- 203-12
Durham, J. W. The "drifting" continents --- 198-151
Dürschner, Horst. Construction of synthetic seismograms from continuous velocity logging data --- 202-285
Dury, G. H. Results of seismic exploration of meandering valleys - 193-334
Dutta, Subhas. Love waves in a nonhomogeneous internal stratum lying between two semi-infinite isotropic media --- 199-73
— On the propagation of Rayleigh waves in a transversely isotropic medium resting on a rigid or yielding base --- 197-120
— Propagation of elastic waves in a floating transversely isotropic ice sheet --- 199-83
— Rayleigh waves in a two-layer heterogeneous medium --- 198-89
DuVall, B. W. See Jenkins, A. W., Jr.
Duvall, G. E. Concepts of shock wave propagation --- 192-105
Dvořák, Z. On the variations of the heat conductivity coefficient in rock samples under pressure --- 192-238
Dvorkin, L. B. Calculation of the error in determination of the position of the bottom of a borehole --- 199-113
— On some circumstances connected with recording the oil-water interface --- 200-316
Dvoryashin, A. S., Levitskiy, L. S., and Pankratov, A. K. Active regions on the Sun and their corpuscular emission --- 195-271
D'yakonov, D. I. Geothermy in regional geology and in the study of subsurface tectonics --- 199-190
Dyck, W., and Fyles, J. G. Geological Survey of Canada radiocarbon dates II --- 203-24
Dykins, J. E. Temperature, salinity, density, and ring tensile strength data for natural and constructed sea ice --- 192-346
Dyson, J. L. The world of ice --- 194-196
Dzhafarov, Kh. D. On the effectiveness of combined application of geophysical methods of surveying in Azerbaijan SSR (exemplified by the Caspian-Kuban region) --- 193-160
— On the problem of determining the coefficient of anisotropy of four-layered sections of KH type from VEZ curves --- 193-132
Dzhafarov, Kh. D., and Bayramova, R. A. Problem of construction of structural maps according to geophysical data --- 201-168
Dzhanuzakov, K. D. See Vvedenskaya, N. A.

E

Earp, J. R., Francis, E. H., and Read, W. A. Discussion on J. B. Sissons' paper on late-glacial shorelines --- 200-194
Earthquake Research Institute. Observations of aftershocks in the Imaichi region --- 203-81
Easton, A. J., and Lovering, J. F. The analysis of chondritic meteorites --- 203-44
Eaton, G. P. Volcanic ash deposits as a guide to atmospheric circulation in the geologic past --- 195-285
Eaton, J. P. Crustal structure and volcanism in Hawaii --- 202-313
Eaton, J. P., and Krivoy, H. L. Hawaiian Volcano Observatory summary --- 203-67

Abstract

Eberhard, Oskar. Earth tide observations. Pt. 1. Results of the Earth tide observations in 1958-59 by the First Division of the German Geodetic Research Institute in Berchtesgaden ---------- 192-100

Eberhardt, Peter, and Ferrara, Giorgio. Confirmation of the absolute age of the granodiorite outcrop in Elba Island with potassium-argon measurements ---------- 196-19

Eberhardt, Peter, Ferrara, Giorgio, Glangeaud, Louis, Gravelle, Michel, and Tongiorgi, Ezio. On the absolute age of the metamorphic formations of the western Ahaggar in the Silet-Tibehaouine area (central Sahara) ---------- 199-15

Eberhardt, Peter, Ferrara, Giorgio, and Tongiorgi, Ezio. Determinations of the absolute age of allochthonous granites of the northen Apennine ---------- 198-16

Eberle, A. R. See Finley, H. O.

Echols, Carol. See Davis, T. N.

Écollan, Jean, and Rocard, Yves. Electromagnetic signal of underground explosions ---------- 197-128

Edgerton, H. E. Sub-bottom penetrations in Boston Harbor ---------- 199-338

Edwards, George. See Gordy, P. L., and Hsu, K. J.

Egeland, Alv. See Ortner, Johannes.

Eggleton, R. E. Thickness of the Apenninian Series in the Lansberg region of the Moon ---------- 200-66

See also Shoemaker, E. M.

Egyed, László. On the problem of the evolution of the Red Sea ---------- 198-158

—— Temperature and magnetic field ---------- 203-243

—— The expanding Earth? ---------- 199-140

Ehara, Shingo. Geotectonics of the Pacific: Division of the northern Pacific into two oceanic parts, and the tectonic comparison of both the continents, western and eastern ---------- 197-181

Ehmann, W. D. The abundance of nickel in some natural glasses ---------- 194-47

Ehmann, W. D., and Setser, J. L. Zirconium and hafnium in stone meteorites ---------- 196-34

See also Amiruddin, A., and Rushbrook, P. R.

Ehmert, A. See Keppler, E.

Eicher, R. N. See Davis, C. W., and Stieff, L. R.

Einarsson, Trausti. A survey of the geology of the area Tjörnes-Bárdardalur in northern Iceland, including paleomagnetic studies ---------- 194-280

Elizalde, C. O. An electromagnetic survey for development in a zone with cupriferous manifestations ---------- 196-186

Ellison, M. A. Solar flares and associated phenomena ---------- 202-215

Elmore, P. L. D. See Faul, Henry.

Elsaharty, A. F. See Grant, F. S.

Elstner, C. See Petkoff, I.

Emery, C. L. Applied rock mechanics ---------- 198-349

See also Roberts, A.

Emery, K. O., and Bray, E. E. Radiocarbon dating of California basin sediments ---------- 196-8

Emery, K. O., and Niino, Hiroshi. Sediments of the Gulf of Thailand and adjacent continental shelf ---------- 202-308

See also Kaplan, I. R.

Endo, Kunikiho. See Kigoshi, Kunihiko.

Enenshteyn, B. S. Interpretation of two-layered curves of frequency electromagnetic sounding of the type $P_2<P_1$ ---------- 192-121

See also Tikhonov, A. N.

Enescu, Dumitru. See Constantinescu, Liviu.

Engdahl, E. R. See Gunst, R. H.

Engel, A. E. J. Geological evolution of North America ---------- 199-143

See also Engel, C. G.

Abstract

Engel, C. G., and Engel, A. E. J. Basalts dredged from the northeastern Pacific Ocean 202-309

Engel, Karl. Diameter-depth relations and origin of lunar craters 196-88

Engelen, G. B. Indications for large scale graben formation along the continental margin of the eastern United States 199-144

England, C. M. The "shot popping" method and application of directional scanning to interpretation 196-328

England, J. L. See Boyd, F. R.

English, W. N., Evans, D. J., Lokken, J. E., Shand, J. A., and Wright, C. S. Equipment for observation of the natural electromagnetic background in the frequency range 0.01-30 cycles per second 192-131

Englund, K. J., and Roen, J. B. Origin of the Middlesboro Basin, Kentucky 198-31

Engstrand, L. G. See Östlund, H. G.

Eppley, R. A., and Cloud, W. K. United States earthquakes 1959 200-83
See also Johnson, R. H.

Epstein, Samuel. See Taylor, H. P., Jr.

Erimesco, P. Geophysics of ocean basins 196-347

—— The earthquake in The Bay of Agadir 198-57

Erkel, András. See Ádám, Antal.

Ertel, Hans. Relation between the individual derivative and a certain spatial divergence in hydrodynamics 195-239

—— Theorem on substantial invariants of hydrodynamics 195-238

Eshelman, V. R., and Gallagher, P. B. Radar studies of 15th-magnitude meteors 196-40

Espagno, Lucien. See Harms, Gunter.

Espinosa, A. F., Sutton, G. H., and Miller, H. J. A transient technique for seismograph calibration 193-95

Espinosa, Alvaro. See Brune, J. N.

Eva, Claudio. See Bossolasco, Mario.

Evans, A. E. See Ross, W. E.

Evans, Clifford, and Meggers, B. J. Use of organic temper for carbon-14 dating in lowland South America 197-7

Evans, D. J. See English, W. N.

Evans, G. L. Investigations at the Odessa meteor craters 194-53

Everitt, C. W. F. Self-reversal of magnetization in a shale containing pyrrhotite 192-294

—— Thermoremanent magnetization. II. Experiments on multidomain grains 192-290

—— Thermoremanent magnetization III.. Theory of multidomain grains 192-291

Evernden, J. F., and Richards, J. R. Potassium-argon ages in eastern Australia 193-16
See also Leakey, L. S. B.

Evison, F. F. Thickness of the Earth's crust in Antarctica and the surrounding oceans: A reply 201-229
See also Hatherton, T.

Evrard, Pierre, and Jones, Louis. Gravimetric study of the rift of central Africa (region of Nyiragongo and Nyamuragira Volcanoes) 203-206

Ewing, J. I., and Ewing, Maurice. Reflection profiling in and around the Puerto Rico Trench 193-335
See also Antoine, J., Ewing, Maurice, Ludwig, W. J., and Prentiss, D. D.

Ewing, Maurice, Brune, J. N., and Kuo, J. T. Surface-wave studies of the Pacific crust and mantle 202-179

Ewing, Maurice, and Ewing, J. I. Sediments at proposed LOCO drilling sites 194-334

Abstract

Ewing, Maurice, Ludwig, W. J., and Ewing, J. I. Geophysical investigations in the submerged Argentine coastal plain. Part 1. Buenos Aires to Peninsula Valdez ---------------------------- 198-332
See also Dorman, James, Ewing, J. I., Landisman, Mark, Ludwig, W. J., and Sato, Yasuo.
Eygenson, L. S. Principles of the modeling of physical processes - 196-205

F

Faass, D. L. See Van Melle, F. A.
Facca, G., and Tonani, F. Natural steam exploration in U. S. A --- 193-238
Fackler, W. D. See Dempsey, W. J.
Fail, J. P., and Grau, G. Fan filters -------------------------- 202-271
Fail, J. P., Grau, G., and Lavergne, Michel. Coupling of seismographs with the ground ------------------------------------ 195-320
Faina, G. See Ancarani-Rossiello, L.
Faini, G., and Svelto, O. Signal-to-noise considerations in a nuclear magnetometer -- 196-278
Fairbairn, H. W. See Bailey, S. W., Beall, G. H., Faure, G., Hower, J., and Hurley, P. M.
Fairbridge, R. W. New radiocarbon dates of Nile sediments ------ 196-14
—— The Melanesian border plateau, a zone of crustal shearing in the S. W. Pacific-- 198-153
Fairfield, D. H. Ionosphere current patterns in high latitudes ----- 201-255
Fanale, F. P., and Kulp, J. L. The helium method and the age of the Cornwall, Pennsylvania magnetite ore ------------------- 197-11
Fandyumina, S. M. See Ostrovskiy, A. Ye.
Fanselau, Gerhard. Geomagnetic field balances------------------- 192-302
—— On the distribution of geophysical elements as a function of the coordinate system -- 195-235
Fara, H. D., and Scheidegger, A. E. An eigenvalue method for the statistical evaluation of fault plane solutions of earthquakes -- 203-78
Farrand, W. R. See Broecker, W. S.
Fast, V. G. See Plekhanov, G. F.
Fastovskiy, U. V. See Nalivayko, V. I.
Fatt, Irving. See King, M. S.
Faul, Henry, and Jäger, Emilie. Ages of some granitic rocks in the Vosges, the Schwarzwald, and the Massif Central----------- 201-14
Faul, Henry, Stern, T. W., Thomas, H. H., and Elmore, P. L. D. Ages of intrusion and metamorphism in the northern Appalachians -- 197-13
See also Przewlocki, Kazimierz.
Faure, G., and Hurley, P. M. The isotopic composition of strontium in oceanic and continental basalts: Application to the origin of igneous rocks --- 201-241
Faure, G., Hurley, P. M., and Fairbairn, H. W. An estimate of the isotopic composition of strontium in rocks of the Precambrian shield of North America ------------------------------ 199-209
See also Hurley, P. M.
Faure-Muret, Anne. See Choubert, Georges.
Faust, L. Y. Some technological aspects of exploration effectiveness --- 200-168
Faynberg, F. S. Magnetization and chemical composition of the traps of the south part of the Siberian platform----------------- 198-254
Faynberg, F. S., and Dashkevich, N. N. Character of the magnetization of the traps on the lower reaches of the Angara ------ 201-278
See also Metallova, V. V.
Faytel'son, A. Sh. Structure of the sedimentary cover of the Baltic area and the tectonic significance of the gravitational and magnetic anomalies -- 201-213
Feather, J. N. See Handin, John.

Abstract

Fedorenko, A. N. Magnetic tape for seismic recording ---------- 200-337

—— Optimal characteristics of magnetic seismic recording ---------- 200-336

Fedorenko, Ya. D. Use of geophysical methods for subdividing granites in the eastern Transbaikal ---------- 194-174

Fedorov, A. A. See Sokolov, M. N.

Fedorov, Ye. P., and Korsun', A. A. Preliminary data on the motion of the Earth's pole during the IGY and in 1959 ---------- 193-104

Fedotov, S. A. Absorption of transverse seismic waves in the upper mantle and the energy classification of near earthquakes with intermediate depth of focus ---------- 203-73

—— Determination of areas of origin of tsunami in connection with the Kamchatka earthquake of November 4, 1952 and the Iturup earthquake of November 6, 1958 ---------- 196-125

—— Macroseismic description of the Iturup earthquake of November 7, 1958 ---------- 194-71

Fedotov, S. A., and Kuzin, I. P. Velocity section of the upper mantle in the area of the southern Kurile Islands ---------- 203-231

Fedynskiy, V. V. Deep seismic sounding in the complex of regional geophysical investigations ---------- 194-311

—— On the problem of the classification of gravimetric operations and the new technical manual of gravimetric surveying ---------- 198-173

—— The tasks of marine gravimetric expeditions of MGU (1954-1958) ---------- 199-182

See also Belyayevskiy, N. A., and Riznichenko, Yu. V.

Fejer, J. A. The effects of energetic trapped particles on magnetosphere motions and ionospheric currents ---------- 192-280

See also Dessler, A. J.

Fehlhaber, Lothar. Effect of extraterrestrial corpuscular streams on the magnetic field of the Earth ---------- 201-257

Felber, Heinz. On the efficiency of a C-14 age determination apparatus ---------- 197-8

Fel'dman, I. I. The discovery of manganese beds by neutron methods of examining boreholes ---------- 197-320

—— The recognition and study of boron-bearing beds by neutron methods of investigating boreholes ---------- 197-321

Fel'dshteyn, Ya. I. Magnetic activity at high latitudes in the Northern Hemisphere ---------- 201-261

See also Lopatina, G. B.

Fergusson, G. J., and Libby, W. F. UCLA radiocarbon dates II -- 203-21

Fernandes, Gérson. Radioactivity datums of regional correlation of the Middle Amazon ---------- 193-327

Ferrara, Giorgio, Hirt, Berhnard, Jäger, Emilie, and Niggli, Ernst. Rb-Sr and U-Pb age determinations on the pegmatite of I Mondei (Penninic Camughera-Moncucco-Complex, Italian Alps) and some gneisses from the neighborhood ---------- 210-13

Ferrara, Giorgio, and Longinelli, A. Age of two granitic rocks from the zone of the mountains in Calabria ---------- 201-12

See also Cervenjak, Z., and Eberhardt, Peter.

Fesenkov, V. G. A note on the cometary nature of the Tungus meteorites ---------- 201-30

—— On the density of meteoric matter in interplanetary space and the possible existence of a dust cloud around the Earth ---------- 196-50

—— Not a meteorite, but a comet ---------- 193-22

Feygel'man, A. L. Use of the "Poisk" radiogeodetic system as the systematic basis of geophysical surveys ---------- 199-134

Feytel'man, N. G. See Mikheyev, G. F.

Fielder, Gilbert. Determination of relative ages of lunar craters by albedo and polarization measurements ---------- 196-89

—— Lunar domes ---------- 196-93

—— Lunar slopes ---------- 196-92

—— Lunar tectonics ---------- 203-56

Abstract

Fielder, Gilbert. Measured profiles of the Moon's surface and the estimates of magnitudes of the errors in relative altitudes ------ 196-77
—— Nature of the lunar maria ------ 201-53
—— On the overlapping of lunar craters ------ 201-55
—— Project Moonhole ------ 201-54
—— Ray elements and secondary-impact craters on the Moon ------ 193-61
—— Selected lunar observations made at the Pic-du-Midi Observatory in 1956 and 1959 ------ 196-71
—— Stresses in the Moon ------ 193-55
—— Structure of the Moon's surface ------ 197-54
—— The contraction and expansion of the Moon ------ 192-36
—— The depths of small lunar craters; a master chart of ghost craters ------ 196-85
—— Topography and tectonics of the lunar Straight Wall ------ 202-46
Fielder, Gilbert, and Jordan, Carole. Selenological implications drawn from distortions of craters in the Hipparchus region of the Moon ------ 192-37
Fielder, Gilbert, and Warner, Brian. Stress systems in the vicinity of lunar craters ------ 192-38
See also Kopal, Zdeněk.
Filippov, Ye. M. Applied nuclear geophysics ------ 203-308
—— Fundamentals of the theory of photoneutron investigation of rocks and ores ------ 192-325
—— Principles of the theory of distribution of neutrons in strongly absorbing rocks and ores ------ 193-322
Filippov, Ye. M., and Kuznetsov, G. A. Investigation for selection of the best design for a gamma densitometer ------ 192-318
See also Polak, L. S.
Filonov, V. A. Radioactive elements in waters of the oilfields of northern Cis-Caucasia ------ 199-280
Finch, H. F. Annual changes in the declination ("variation") in western Scandinavia and the North Sea ------ 195-250
Finger, D. L., Kolomiytseva, G. I., Novysh, V. V., and Priyezzhev, G. M. Experimental measurements of the Earth's magnetic field by magnetometers towed astern a ship ------ 194-287
—— Pilot survey of the Earth's magnetic field with magnetometers towed behind an iron ship ------ 198-228
Fink, L. K., Jr. See Hurley, R. J.
Finley, H. O., Eberle, A. R., and Rodden, C. J. Isotopic boron composition of certain boron minerals ------ 194-227
Fireman, E. L. See DeFelice, J.
Firminhac, R. H. See Proctor, C. M.
Firsoff, V. A. Moon Atlas ------ 195-32
—— Selenological implications of the South-Australian ring structures ------ 199-45
—— Selenological studies, I ------ 196-72
Firsov, L. V. Absolute dating of the igneous rocks of Crimea as key formation for the Bajocian ------ 200-26
—— On the absolute age of the metamorphic rocks of northeastern U.S.S.R. and manifestations of multiple metamorphism ------ 197-26
Fisak, V. M. See Ryss, Yu. S.
Fischer, W. A. Depiction of soil-covered structures by infrared aerial photography ------ 201-220
See also Henderson, R. G.
Fisher, D. E. "Ages" of the Sikhote Alin iron meteorite ------ 197-48
—— Cosmogenic rare gas ratios in iron meteorites ------ 193-29
Fisher, J. E. Two tunnels in cold ice at 4,000 m on the Breithorn - 201-194
Fisher, R. L., and Raitt, R. W. Topography and structure of the Peru-Chile trench ------ 198-353

Abstract
Fishman, M. V. New data on the age of the granitic formations of the Polar Urals 196-24
Fitch, F. H. Possible role of continental core movements in the geological evolution of British Borneo 202-122
See also Anders, Edward.
Fitzpatrick, John. Biaxial device for determining the modulus of elasticity of stress-relief cores 196-166
Flavin, J. N. Thermo-elastic Rayleigh waves in a prestressed medium 192-114
Flawn, P. T. See Wasserburg, G. J.
Flesch, G. D. See Svec, H. J.
Flinn, Derek. On folding during three-dimensional progressive deformation 196-340
Flock, W. L., Belon, A. E., and Heacock, R. R. Geomagnetic agitation and overhead aurora 203-63
Florenskiy, K. P. The problem of cosmic dust and the present state of study of the Tungus meteorite 200-58
Florenskiy, K. P., and Zotkin, I. T. New exploration, new results 193-23
Florensov, N. A. On the nature of the relationship of Neogene-Quaternary volcanism and neotectonics in the Baikal area 202-133
See also Solonenko, V. P.
Flores A., Roderigo. See Steinbrugge, K. V.
Fluit, J. M. See Heymann, D.
Fogel', A. A., and Gorbunova, I. V. Seismicity of the northern Tien Shan 192-73
Fogler, V. K., and Fogler, Z. V. Some data on the geology of the Mindey arch according to results of a detailed gravimetric survey 195-201
Fogler, Z. V. See Folger, V. K.
Fokin, A. F. Field of a buried point source in the presence of a contact 194-125
Fokshanskiy, Yu. L. On some features of the basement structure of the southern part of the Moscow syneclise and the Ryazan' downwarp according to the data of geophysical investigations 198-280
Foldvari-Vogl, M., and Kilburszky, B. Determination of strontium age on biotites from granites 192-8
Fomenko, K. Ye. Wave patterns in deep seismic investigations of the Earth's crust in southeastern Turkmenia 194-340
See also Godin, Yu. N.
Fonarev, G. A. Some data on telluric currents in the Barents Sea 200-82
—— Variations in marine telluric currents 199-54
Fontan, Jacques, Blanc, Daniel, Bonnafous, M., and Bouville, Andre. A method of direct dosage of the radon and thoron contained in the atmosphere. Application to the study of the radioactive equilibrium between these gases and their descendants 196-310
Fontan, Jacques, Blanc, Daniel, and Bouville, André. Concentration of radon and thoron in the air above the Atlantic Ocean. Radioactive equilibrium between these gases and their descendants 201-310
Fontan, Jacques, Blanc, Daniel, Bouville, André, and Lacaze, J. Meteorological conditions dependence of radon concentration in the air above the Atlantic Ocean 197-311
Fontes, J.-C., Glangeaud, Louis, Gonfiantini, Roberto, and Tongiorgi, Ezio. Isotopic composition and origin of the thermal waters and gases of the Massif Central 197-225
Forbes, R. F. S. See Harrison, J. C.
Ford, A. B., Hubbard, H. A., and Stern, T. W. Lead-alpha ages of zircon in quartz monzonite porphyry, Thiel Mountains, Antarctica - A preliminary report 198-23
Fornaca-Rinaldi, Giuseppina. See d'Albissin, Micheline.

Abstract

Forrás, Andras, and Szemerédy, Pál. Experiments with a proton magnetometer in Hungary ---- 192-261

Forrer, Robert, and Maechler, Paul. Analyzer for paramagnetic substances ---- 198-251

Forsyth, W. A. L. The reduction of aeromagnetic survey data ---- 192-297

Foster, F., and Mulvey, J. H. ^{3}He nuclei in the primary cosmic radiation ---- 197-232

Fotiadi, E. E. Geophysical investigations in Siberia and the Far East ---- 198-139

—— The present state, problems, and prospects of geophysical investigations in Siberia and the Far East ---- 197-164

Fougere, P. F. Spherical harmonic analysis. 1. A new method and its verification ---- 197-168

Fournier, Hugo. Directional spectrography makes evident a remarkable selective telluric and magnetic polarization at the geophysical station of Nivernais ---- 195-35

—— Geophysics - On the very particular case of directional distribution of values of the apparent resistivity data by magneto-telluric sounding for the period of 20 seconds ---- 195-36

—— The magneto-telluric directional spectrometry at Garchy (Nièvre) ---- 203-65

—— The magneto-telluric directional spectrography relative to Garchy ---- 195-37

—— The magneto-telluric sounding at Garchy ---- 199-49

Fowler, W. A. Nuclear clues to the early history of the solar system ---- 198-25

Francalanza, Antonino. Seismic data and volcanism ---- 202-182

Francaviglia, Antonio. Results of some investigations on the Sicilian sulfur-bearing gypsiferous series ---- 192-135

Francis, E. H. See Earp, J. R.

Francis, T. J. G. Black Mud Canyon ---- 198-354

Frank, L. A., Van Allen, J. A., and Macagno, E. Charged-particle observations in the Earth's outer magnetosphere ---- 201-246

Frantsesson, Ye. V. Comparison of the magnetic properties and chemical composition of ilmenites from the kimberlite pipes of Yakutia ---- 193-290

Fraser, D. C. Sun chart compass corrections for reconnaissance mapping and geophysical prospecting in areas of magnetic disturbance ---- 196-304

Fratucello, G. See Drigo, Angelo.

Frederiksson, Kurt, and Gowdy, Robert. Meteoritic debris from the southern California desert ---- 199-33

Frederiksson, Kurt, and Keil, Klaus. The light-dark structure in the Pantar and Kapoeta stone meteorites ---- 203-43

Frederiksson, Kurt, and Martin. L. R. The origin of black spherules found in Pacific islands, deep-sea sediments, and Antarctic ice ---- 199-34

Frederiksson, Kurt, and Ringwood, A. E. Origin of meteoritic chondrules ---- 203-41

Freeman, J. W., Van Allen, J. A., and Cahill, L. J. Explorer 12 observations of the magnetospheric boundary and the associated solar plasma on September 13, 1961 ---- 199-217

Freier, S., Greenshpan, M., Hillman, P., and Shechter, H. The antiferromagnetic Curie point in α-Fe_2O_3 ---- 193-289

French, D. N. See Kingery, W. D.

Fridman, Sh. D. See Balyasnyy, N. D.

Fridman, Ya. B. Laws of the fracturing of solid bodies applicable to problems of tectonophysics ---- 196-124

Friedman, Irving, and Hall, W. E. Fractionation of O^{18}/O^{16} between coexisting clacite and dolomite ---- 200-240

Abstract

Friedman, Irving, Sigurgeirsson, Thorbjörn, and Gardarsson, Örn. Deuterium in Iceland waters ---------- 202-192
Friedman, Irving, and Smith, R. L. A new dating method using obsidian: Part 1, the development of the method ---------- 197-9
See also Gonsior, Bernhard, Lovering, T. S., and Woodcock, A. H.
Friedman, Melvin. See Borg, Iris, and Handin, John.
Friedmann, Helmut von. Amplifier hook-up for enhancing reflections for seismic registration ---------- 195-323
—— Device for forewarning in seismic measurements at sea ---------- 201-340
Frischknecht, F. C., Petrafeso, F. A., and others. Aeromagnetic maps of Arizona ---------- 202-245, 202-246
See also Black, R. A.
Frissora, J. See Soberman, R. K.
Fritsch, Volker. The demonstration and geoelectric investigation of a "lightning nest" ---------- 199-115
Fritz, J. N. See McQueen, R. G.
Frölich, Friedrich. Paleomagnetic investigations (Petrophysical reliability tests) ---------- 195-279
Frölich, Friedrich, and Stiller, Heinz. Changes in rock magnetization and their determinability ---------- 197-255
—— Methods of rock research (for paleomagnetic purposes) ---------- 196-295
Frolov, A. I. See Tsukernik, V. B.
Frolov, N. M. Experimental determination of the extent of influence of gravitational convection and well casings on the natural distribution of temperature in boreholes ---------- 202-166
—— On the effect of solar radiation on the thermal regime of the Earth's crust ---------- 196-246
Frye, J. C., and Willman, H. B. Development of Wisconsinan classification in Illinois related to radiocarbon chronology ---------- 200-11
Fryklund, V. C. See Arnold, R. G.
Fuchs, K., and Kappelmeyer, O. Report on reflection measurements in the Dolomites - September 1961 ---------- 193-242
Fujiki, Y. See Sawada, M.
Fukushima, Naoshi. Gross character of geomagnetic disturbance during the International Geophysical Year and the Second Polar Year ---------- 200-263
Fullam, E. F. See Hemenway, C. L., and Soberman, R. K.
Fuller, M. D. Magnetic anisotropy and paleomagnetism ---------- 194-274
See also Uyeda, Seiya.
Furukawa, Toshitaro. Report on the reconnaissance for uranium-bearing rock in the Tagawa district, Fukuoka Prefecture ---------- 198-301
Futamase, Kiyosi. See Yamaguchi, Hisanosuke.
Futterman, W. I. Dispersive body waves ---------- 194-94
Fyles, J. G. See Dyck, W.

G

Gabril'yan, A. M. Some data on the total isotopic composition of the waters of the oil fields of Fargana ---------- 197-227
Gabriyelyan, A. A. The relationship of effusive volcanism to tectonics (exemplified by the Lesser Caucasus) ---------- 202-129
Galanopoulos, A. G. On magnitude determination by using macroseismic data ---------- 193-73
—— On the determination of the age of the Santorin caldera ---------- 198-17
—— On the location and size of Atlantis ---------- 193-364
—— On the origin of the Deluge of Deukalion and the myth of Atlantis ---------- 193-364
—— Tsunamis observed on the coasts of Greece from antiquity to present time ---------- 192-91
Galat, G. A. See Bromery, R. W.

	Abstract
Galeyeva, G. M. Basic differences between the volcanic manifestations of island arcs, continental margins, and intracontinental regions	202-349
Galkin, I. N., and Kichin, N. N. Use of the amplifier of the SS-30/60 refraction correlation station for deep seismic sounding work	199-331
Galkin, I. N., and Zayonchkovskiy, M. A. On the apparatus of deep seismic sounding	194-329
Gallagher, P. B. See Eshelman, V. R.	
Gallant, R. L. C. Meteorite impacts, lunar maria, lopoliths and ocean basins	196-223
Galli O., Carlos. See Segerstrom, Kenneth.	
Gal'perin, Ye. I. Determination of the attitude of a refracting boundary according to the directions of displacement in first waves observed in boreholes	202-266
—— Study of the direction of the vector of displacement in seismic waves in connection with observations in boreholes	201-330
Gal'perin, Ye. I., Kosminskaya, I. P., and Krakshina, R. M. Main characteristics of deep waves registered in deep seismic sounding in the central part of the Caspian Sea	194-347
Gal'perin, Ye. I., Kosminskaya, I. P., Krakshina, R. M., Mikhota, G. G., Tulina, Yu. V., Veytsman, P. S., and Zverev, S. M. Some results of investigations by deep seismic sounding of the crustal structure in the region of the Kurile island-arc and in the adjoining portions of the Pacific Ocean	198-203
See also Aver'yanov, A. G., and Veytsman, P. S.	
Galushko, P. Ya. On the possibility of studying the structure of the Earth's crust according to gravity anomalies	193-200
Galyavich, A. Sh. See Anpilogov, A. P.	
Gangadharam, E. V., Rao, K. K., and Aswathanarayana, U. Distribution of radioactivity in the Mosaboni copper mine, Bihar, India	202-259
Gantar, C. Tables of Eötvös correction to continuous sea gravity measurements for Mediterranean Sea latitudes	197-206
Gantar, C., and Morelli, Carlo. First order world gravity loop, 1962	193-216
—— Measurements of gravity on the bottom of the sea around Sardinia with telecontrolled gravimeter	193-228
—— Measurements with gravimeters along the northern part of the European Calibration Line	193-218
—— Some observations on the present situation of the European Gravity Calibration System	193-217
Gantar, C., Morelli, Carlo, and Pericoli, A. Trilateral network in the Spanish Sahara	203-169
Gantar, C., Morelli, Carlo, and Pisani, M. Experimental study of the response of the Graf-Askania Gss2, no. 13, sea gravimeter	192-216
See also Allan, T. D.	
Garanin, V. A. See Rogoza, O. I.	
Garazha, V. I. See Barabashev, N. P.	
Gardarsson, Örn. See Friedman, Irving.	
Gardner, G. H. F. See Wyllie, M. R. J.	
Garkalenko, I. A. See Sollogub, V. B.	
Garkalenko, I. O., and Kholin, V. N. An efficient combination of geophysical investigations of wells in the Belozerka iron ore region and Krivoy Rog basin	199-111
Garkalenko, I. O., and Shchitov, N. A. Choice of optimal speeds in the recording of gamma-gamma logging curves	198-302
Garland, B. See Brokaw, A. L.	
Garner, E. L. See Rosholt, J. N., Jr., and Shields, W. R.	
Gasanenko, L. B. Approximate expressions for the field of a dipole on a horizontally layered structure with weakly conducting base	197-132

Abstract

Gasanenko, L. B. The field of a harmonic magnetic dipole over the surface of a multilayered structure -------------------------- 192-124

—— The impedance of the field of a low-frequency elevated magnetic dipole -- 197-133

Gasanenko, L. B., and Sholpo, G. P. On the problem of calculation of the field of a low-frequency dipole in a distant zone ------ 197-130

Gasanenko, L. B., Sholpo, G. P., and Terekhin, Ye. I. Some functions of the complex argument encountered in the theory of low-frequency fields -- 197-131

Gaskell, T. F. Seismic results in relation to the Andesite Line---- 195-343

—— Techniques of geophysical exploration ---------------------- 197-166

See also Irving, E.

Gasparini, R. A., and Sabini, P. Considerations concerning a radiometric survey of the Island of Ischia ---------------------- 192-319

Gass, I. G., Harris, P. G., and Holdgate, M. W. Pumice eruption in the area of the South Sandwich Islands ----------------- 203-358

Gass, I. G., and Masson Smith, D. The geology and gravity anomalies of the Troodos massif, Cyprus -------------------------- 202-158

Gassmann, Fritz. Contribution to the gravimetric determination of rock densities and of curvature of the plumbline in the Earth's crust -- 193-190

Gast, P. W. The isotopic composition of strontium and the age of stone meteorites--I --- 193-33

Gastil, Gordon. See Bushee, Jonathan.

Gates, J. S. Geohydrologic evidence of a buried fault in the Erda area, Tooele Valley, Utah ----------------------------------- 193-223

Gaulon, R. Group velocity and phase velocity of Love waves with periods between 160 and 315 seconds------------------------ 195-66

Gault, D. E. See Moore, H. J.

Gavlina, G. B. Hydrogeological and geothermal conditions of the Minusin intermontane depression ------------------------------ 199-189

Gavrish, V. K. See Andreyeva, R. I.

Gay, S. P., Jr. Standard curves for interpretation of magnetic anomalies over long tabular bodies ---------------------------- 199-246

Gaynanov, A. G. Gravimetric measurements in the Antarctic and Atlantic Oceans and Mediterranean Sea during the ninth voyage of the whaling flotilla "Slava" ---------------------------------- 199-168

—— Gravimetric measurements on diesel-electric ship "Ob" during the first Antarctic voyage ----------------------------------- 199-183

See also Kuzivanov, V. A.

Gazel, Jacques; Lasserre, Marc; Limasset, J.-C.; and Vachette, Michelle. Absolute ages of the latest granitic massifs and of the tin mineralization of the central Cameroun ------------------- 200-21

Gehl, M. A. See Haskin, Larry.

Gehlen, Kurt, von, Nielsen, Heimo, and Ricke, Werner. S-isotope ratios in barite and sulfides from hydrothermal veins in the Black Forest and younger barite veins in southern Germany and their genetic significance -- 194-232

Geijer, P. See Wickman, F. E.

Geiss, Johannes, and Oeschger, Hans. The impact of cosmic radiation in meteorites --- 193-36

See also Herr, W.

Gel'chinskiy, B. Ya. See Golikova, G. V.

Gel'fand, I. S. Electromagnetic field of a vertical dipole in multilayered medium --- 195-108

Gel'man, O. Ya. On the accuracy of the potassium-argon method of determining the absolute age of minerals and rocks ------------ 193-5

See also Rubinshteyn, M. M.

Gendrin, Roger. On a theory of structured rapid pulsations. Calculation of the observed frequencies -------------------------- 203-258

Abstract

Gendrin, Roger, and Stefant, Robert. Frequency analysis of pearl oscillations 193-280

—— Registration and spectral analysis of very low frequency vibrations of the magnetic field in the 1 to 50 cycles per second range 193-281

Gentner, W. Isotopic variations in meteorites and the early history of our solar system 201-24

Gentner, W., Lippolt, H. J., and Schaeffer, O. A. Argon determination on the potassium minerals--II. The potassium-argon age of the glasses of the Nördlinger Ries and of the Bohemian-Moravian tektites 197-21

—— The potassium-argon age of a glass sample from Nördlinger Ries 193-50

See also Lippolt, H. J.

Geological Survey of Japan. Brief review of airborne geophysical surveys in Japan 192-320

Geological Survey of Korea. Airborne geophysical surveying in the Republic of Korea 192-308

Geophysical Prospecting. Discussion on the symposium on synthetic seismograms 202-287

Georgalas, G. C. The eruption of Santorin Volcano in 1938-41; the eruption of the Nike dome 202-331

Gerasimov, N. N. See Sokhranov, N. N.

Gerasimov, Yu. G. Some results of geologic investigations in the zone of magnetic anomalies at the contacts of the Obruch series of rocks 198-282

Gerharz, R. On the possibility of lunar magnetism and its cause by the photoeffect 203-57

Gerling, E. K., Levskiy, L. K., and Morozova, I. M. On the problem of the diffusion of radiogenic argon from minerals 202-4

Gerling, E. K., and Morozova, I. M. Determination of the spectrum of values of the activation energy of emission of argon and helium from minerals 199-4

Gerling, E. K., and Ovchinnikova, G. V. On the causes of underestimating the age of micas in determinations by the Rb-Sr method 193-4

Gerling, E. K., and Shukolyukov, Yu. A. On the calculation of age by the Pb-U method according to radioactive minerals containing common lead 192-1

—— On the calculation of the time of differentiation of primary magma according to data of the K-Ar method 200-6

Gerling, E. K., Shukolyukov, Yu. A., Kol'tsova, T. V., Matveyeva, I. I., and Yakovleva, S. Z. Determination of the age of basic rocks by the K-Ar method 195-13

Germai, G. See Cuypers, M.

Gershanik, Simon, Barcala, J., and Marabini, R. Some suggestions for the construction of a flat response seismograph 199-70

Gershanovich, I. M., and Makaridin, N. A. A method of measuring the volumetric rate of movement of fluids along a well for solving a number of problems of hydrogeology 200-140

Geslin, Marcel, and Urbain, Pierre. Study of the radioactivity of the thermal waters and of the rocks of the area of Lamalou and Bedarieux (Herault) 197-305

Gettemy, J. W. See Knapp, D. C.

Geyer, Barbara. See Bushee, Jonathan.

Gèze, Bernard. Additional observations on the regulations for protection against volcanic eruptions 203-360

Gfeller, Chr., and Oeschger, H. Bern radiocarbon dates III 203-38

Abstract

Ghosh, M. L. Formation of cracks due to moving source over a thick crust -- 199-350
—— On Love waves across the ocean -- 200-102
—— On passage of Love waves in low period range across the ocean -- 196-129
—— Reflection of Love wave from a rigid obstacle -- 196-154
Gibowicz, Sławomir. Magnitude and energy of subterrane shocks in Upper Silesia -- 199-62
—— The magnitude, energy and frequency of subterranean shock in Upper Silesia -- 197-76
Giese, P. See Behnke, Cl.
Giffin, Charles, Kaufman, Aaron, and Broecker, Wallace. Delayed coincidence counter for the assay of actinon and thoron -- 197-312
Gil'bershteyn, P. G. Calculation of the velocity of the longitudinal wave propagating in a perforated seismic model -- 198-94
Gil'bershteyn, P. G., and Gurvich, I. I. On the normal reflection of longitudinal waves in perforated materials for seismic modeling -- 198-95
—— Velocity of elastic waves in perforated materials for seismic modeling -- 193-113
Gil'bershteyn, P. G., and Pochtovik, V. S. On the use of porous materials for preparation of three-dimensional seismic models with controlled properties -- 198-96
Gilbert, Daniel. See Aubert, Maurice.
Gilbert, F. P. See Bromery, R. W., Dempsey, W. J., and Henderson, J. R.
Gilbert, Freeman. Diffraction and scattering of impulsive elastic waves -- 197-110
Gilbert, Freeman, Laster, S. J., Backus, M. M., and Schell, Richard. Observation of pulses on an interface -- 192-104
Giletti, B. J. See Bassett, W. A.
Gilfillan, J. F. Thermoelectricity and resistivity of pyrite from Renison Bell and Mt. Bischoff, Tasmania - Discussion -- 198-132
Gill, J. E. Orogenesis and ore deposits -- 203-175
Gilluly, James. The tectonic evolution of the western United States -- 202-115
Gilman, Ralph. See Press, Frank.
Gilvarry, J. J. Dimensional correlation of lunar maria and terrestrial ocean basins -- 195-31
—— Origin of lunar surface features and of terrestrial ocean basins and continents -- 194-63
Gimayev, R. S. See Orlov, L. I.
Giovinetto, M. B. See Bentley, C. R.
Giraud, A. Characteristics of the Moon's surface layer; an analysis of its radio emission -- 193-60
Girdler, R. W. On the application of hydrostatic pressures to thermal remanent magnetization -- 203-271
—— Rift valleys, continental drift and convection in the Earth's mantle -- 201-175
Giret, Raoul. Airborne radiometry, useful in geologic structural exploration -- 196-318
—— Effect of speed and of the integration constant on the shape of aeroradiometric anomalies -- 195-309
—— Precision in aerial magnetic studies; its effect on the quality of the results -- 199-248
Gjellestad, Guro, and Dalseide, Helge. Annual change in the declination ("variation") in western Scandinavia and the North Sea -- 192-270
195-250
Glaciological Notes. Glaciological activities - 1962 -- 198-160
Gladkiy, K. V. Determining attitude and position of some simple bodies by the spectra of gravity-potential derivatives -- 197-197

Abstract

Gladkiy, K. V. Frequency analysis during treatment and interpretation of gravity-survey and magnetic-survey data, and the possibility of automatic solution in the treatment and interpretation - 197-196

Gladkiy, K. V., Davydov, V. M., and Kozyrev, V. S. An automatic arrangement for tying together networks of reference points ---- 197-203

Glagoleva, I. I. On the analysis of nonpolar latitude variations ---- 196-139

Glangeaud, Louis, and Guardia, Pierre. Paleomagnetism and chronology of the Quaternary eruptions of the Rio Fluvia (Catalonia) ---- 196-299

Glangeaud, Louis, and Létolle, René. Geochemical and geodynamic evolution of the magmas of the Mont Dore volcanic massif and of the Auvergne. Methods and general consequences ---- 194-186

—— The isotopes of the light elements. Their role in problems of geodynamics and planetology ---- 194-225

See also Eberhardt, Peter, and Fontes, J. C.

Glass, J. J. See Roy, S. K.

Glavchev, P. A. See Voskoboynikov, G. M.

Glebova-Kul'bakh, G. O. Absolute age of the granites and supercrustal rocks in the folded zones of the Karelides ---- 201-19

Glebovskiy, Yu. S. On local magnetic variations and anomalous Earth currents on the coast of Antarctica ---- 199-56

Glebovsky, Y. Methods of aerogeophysical exploration in the Soviet Union ---- 192-298

Gledhill, J. A., and Van Rooyen, H. O. Cape Town anomaly and auroral emission ---- 195-241

Glicken, Milton. See Nettleton, L. L.

Glogovskiy, V. M. On a statistical method of solving some problems of analysis of seismic traveltime curves ---- 199-325

Glogovskiy, V. M., and Kats, S. A. Computation of theoretical VEZ curves with a high-resistance bed in the section ---- 197-144

See also Gurvich, I. I.

Glotov, O. K. On the possibility of using reflection sounding for prospecting uplifted zones and large gently sloping structures of the platform type ---- 199-312

Glover, F. N. Recent magnetic observations in the Philippines ---- 199-228

Glumov, I. F., and Dobrynin, V. M. Variation of specific electrical resistivity of water-saturated rocks under the influence of overburden and formation pressure ---- 200-137

Glyuzman, A. M. The theory of electric surveying of buried structures, 2 ---- 199-87

Godeau, Alain. See Teyssier, J.-L.

Godfrey, J. D. The deuterium content of hydrous minerals from the East-Central Sierra Nevada and Yosemite National Park ---- 197-230

Godfrey, J. D., and Baadsgaard, Halfdan. Structural pattern of the Precambrian Shield in northeastern Alberta and mica age-dates from the Andrew Lake district ---- 200-19

Godin, Yu. N. Seismic investigations of the Earth's crust carried on by the VNIIGeofizika on the Russian platform and in central Asia in 1956-60 ---- 194-338

Godin, Yu. N., Vol'vovskiy, B. S., Vol'vovskiy, I. S., and Fomenko, K. Ye. Study of the structure of the Earth's crust by regional seismic investigations on the Russian platform and in Central Asia ---- 198-200

Godin, Yu. N., Vol'vovskiy, B. S., Vol'vovskiy, I. S., Ryaboy, V. Z., and Shraybman, V. I. Features of the structure of the Earth's crust in western central Asia ---- 193-248

Godin, Yu. N., Vol'vovskiy, I. S., and Ryaboy, V. Z. Some results of the use of deep reflected waves in studies of the Earth's crust ---- 193-249

See also Veytsman, P. S.

Abstract
Godlevskiy, M. N., and Grinenko, L. N. Some data on the sulfur isotopic composition of sulfides from the Norilsk deposit ------- 198-213
Godwin, Harry. Half-life of radiocarbon ------- 193-6
— Radiocarbon dating. Fifth international conference ------- 192-2
Goebel, K. See Charalambus, S.
Goel, P. S. Calculation of production rates of specific nuclides in iron ------- 197-38
Goel, P. S., and Kohman, T. P. Carbon-14 in stone and in iron --- 197-40
Gofshteyn, I. D. The seismotectonics of Transcarpathia ------- 197-78
Goguel, Jean. Tectonics ------- 201-170
— The problems of the upper mantle ------- 203-226
Gojković, Slaviša. See Deleon, Gavrilo.
Gold, L. W. Deformation mechanisms in ice ------- 201-357
Gol'denfel'd, I. V. See Burkser, Ye. S.
Goldich, S. S. See Shields, W. R.
Gol'dshmidt, V. I. Attempt at separating the gravity field into deep and superficial components ------- 197-193
Goldstein, J. I., and Ogilvie, R. E. Electron microanalysis of metallic meteorites. Part 1—Phosphides and sulphides ------- 203-40
Goldthwait, R. P., McKellar, I. C., and Cronk, Caspar. Fluctuations of Crillon Glacier system, southeast Alaska ------- 200-16
Golenetskiy, S. I. Aftershocks of the Gobi-Altay earthquake of December 4, 1957 and some features of the propagation of the seismic waves into the Baikal area and Mongolia ------- 198-78
— Azimuthal anomalies according to observations of the Irkutsk seismic station ------- 199-69
— Determination of thickness of the crust by observations of waves reflected from its bottom, and the depth of foci of the Middle-Baikal earthquake of August 29, 1959 ------- 198-201
Goles, G. G., and Anders, Edward. Abundances of iodine, tellurium, and uranium in meteorites ------- 194-35
Golikova, G. V., Yanovskaya, T. B., and Gel'chinskiy, B. Ya. On the problem of the amplitude curves of longitudinal seismic waves ------- 196-128
Golizdra, G. Ya., and Tyapkin, K. F. On a method of smoothing gravity anomalies ------- 203-197
See also Stupak, N. K.
Golomb, V. E. See Volodarskiy, R. F.
Gol'tsman, F. M. Statistical analysis of errors in experiments in grouping of signals ------- 201-334
See also Kalinina, T. B.
Golubchina, M. N. See Zhidkov, A. Ya.
Golubev, L. N. See Rodionov, P. F.
Golubkov, V. V. See Anishchenko, G. N.
Goncharova, T. A. See Gurevich, B. L.
Gondouin, M., Hill, H. J., and Waxman, M. H. A field streaming-potential experiment ------- 201-139
Gonet, Olivier. The anomalies of gravity in the Canton of Vaud ---- 203-207
Gonfiantini, Roberto, Togliatti, V., Tongiorgi, Ezio, De Breuck, W., and Picciotto, E. E. Geographic variations of oxygen-18/oxygen-16 ratio in surface snow and ice from Queen Maud Land, Antarctica ------- 201-237
— Snow stratigraphy and oxygen isotope variations in the glaciological pit of King Baudouin station, Queen Maud Land, Antarctica ------- 202-197
See also Fontes, J. C.
Gonor, A. L., and Marmorshteyn, L. M. A method of calculating the porosity of rocks under conditions of overburden pressure --- 199-353
Gonsior, Bernhard, and Friedman, Irving. Tritium and deuterium in atmospheric hydrogen ------- 196-270

Abstract

Gonzalez, Laguinge, Horacio. Communication on a magnetometric survey in Serra Grande, Province of Rio Negro ---------- 195-298
Goode, H. D. See Lovering, T. S.
Goodman, A. See Hemenway, C. L.
Gorbatov, L. A. Some features in the operation of logging stations with electronic automatic recorders ---------- 198-121
Gorbenko, V. S. See Sollogub, V. B.
Gorbunova, I. V. See Fogel', A. A
Gordon, D. W. See Carder, D. S., and Romney, Carl.
Gordon, L. I. See Craig, Harmon.
Gordy, P. L., and Edwards, G. Age of the Howell Creek intrusives ---------- 194-11
Gorelov, S. K., and Klubov, V. A. On the relationship of recent tectonic structure and the relief of the crystalline basement in the central and southern areas of the Volga-Ural district ---------- 203-181
Goretskaya, Ye. N. The paleozoic volcanogenetic formations of the Tien Shan and their relationship with different types of tectonic structures ---------- 202-134
Gorodenskiy, S. N. Anomalies related to rotation in the magnetic field of the Earth. Pt. 1 ---------- 193-263
Gorodnicheva, O. P. See Kovalevskiy, I. V.
Gorodnitskiy, A. M. A combination of geophysical methods for large-scale geologic mapping in the search for copper-nickel sulfide mineralization in the southern part of the Yenisei ore field ---------- 199-272
Gorokhov, I. M. On some sources of error in determination of absolute geologic age by the strontium method ---------- 195-6
Gorshkov, G. P. See Gzovskiy, M. V.
Gorshkov, G. S. Directed volcanic blasts ---------- 203-331
—— On the classification and terminology of Pelée and Katmai type eruptions ---------- 202-324
—— On the petrochemistry of volcanic rocks in connection with the formation of island arcs ---------- 198-154
—— On the problem of the classification of some types of explosive eruptions ---------- 202-345
—— On the relations between seismic and volcanic phenomena and the energy balance of the Bezymianny Volcano eruption ---------- 195-351
—— Petrochemical features of volcanism in relation to the types of the Earth's crust ---------- 202-121
—— The Kamchatka Valley of Ten Thousand Smokes ---------- 195-353
—— Volcanic zone of the Kurile Islands ---------- 195-352
Gorshkov, G. S., and Naboko, S. I. Recent volcanism of the Kamchatka-Kurile Arc ---------- 202-342
Gorshkov, G. S., and Zelenov, K. K. Valley of the Geysers ---------- 197-354
Gorskiy, Ya. Ya., and Lukhminskiy, B. Ye. Some problems of the reliability of apparatus for borehole radiometry ---------- 199-304
Goryachev, A. V. On the relationship between geotectonic and geophysical phenomena of the Kurile-Kamchatka folding zone at the junction zone of the Asiatic continent with the Pacific Ocean ---------- 202-55
—— Relationship of seismicity and modern volcanism of the Kurile-Kamchatka fold zone ---------- 197-83
Goryainov, N. N. See Levshin, A. L.
Gorynya, A. A., and Drofa, V. K. Relief of the marginal zone of the Moon ---------- 193-62
Goryunov, I. I. Use of electrical logging data characterizing the reservoir properties of a fractured rock ---------- 198-114
Goto, Kenichi. On the relation between the distribution of aftershocks and the magnitude ---------- 201-78
Gott, G. B. See Brokaw, A. L.

Abstract

Gottfried, David, Moore, Roosevelt, and Campbell, Esma. Thorium and uranium in some volcanic rocks from the circum-Pacific province ---------- 198-195

Gottikh, R. P. See Alekseyev, F. A.

Gough, D. I. Heat flow in the Southern Karroo ---------- 199-184
See also McElhinny, M. W.

Gough, D. L., and Opdyke, N. D. The paleomagnetism of the Lupata alkaline volcanics ---------- 201-282

Goupillaud, P. L. Reply [discussion of paper by H. R. Prescott] -- 201-326

Govaerts, J. See Cuypers, M., and Duquesne, H.

Govorova, L. A. See Pellinen, L. P.

Gowdy, Robert. See Fredriksson, Kurt.

Graf, Anton. The corrections for ship-board gravimeter using a gyroscopically stabilized platform ---------- 192-220

Graham, C. See King, J. W.

Graham, K. W. T., and Morelli, Carlo. The Italy-South Africa gravity tie ---------- 193-220
See also Zijl, J. S. V. van.

Graham, M. H. See deBremaecker, J. Cl.

Graindor, M.-J. The age of the syntectonic Saint Malo migmatite -- 196-17

Graindor, M.-J., and Wasserburg, G.-J. Absolute age determinations in the northern part of the Armorican massif ---------- 196-18

Grammakov, A. G. On the theory of the emanation method for objects of a local kind ---------- 194-301
—— Some problems of the theory of the emanation method ---------- 194-295

Gran, B. V. On the theory of vertical torsion balances ---------- 197-202

Granberry, R. J., and Wilshusen, R. C. Improved interpretation of formation productivity by combined use of core analysis and electric log data ---------- 199-103

Grandjean, Alice. The earthquakes of the Hoggar ---------- 195-49

Grangeon, Pierre. Are the landslides of the Château-de-Rochesauve (Ardèche) the consequence of a paleoearthquake? ---------- 198-64

Granger, H. C. Radium migration and its effect on the apparent age of uranium deposits at Ambrosia Lake, New Mexico ---------- 201-9

Grant, F. S., and Elsaharty, A. F. Bouguer gravity corrections using a variable density ---------- 195-186
See also Morgan, N. A.

Grantov, G. S. See Velikin, A. B.

Grant-Taylor, T. L., and Rafter, T. A. New Zealand radiocarbon age measurements--5 ---------- 193-17
—— New Zealand natural radiocarbon measurements I-V ---------- 203-30

Grantz, Arthur, Thomas, Herman, Stern, T. W., and Sheffey, N. B. Potassium-argon and lead-alpha ages for stratigraphically bracketed plutonic rocks in the Talkeetna Mountains, Alaska ---- 201-10

Grantz, Arthur, and Zietz, Isidore. Regional aeromagnetic surveys for petroleum in Alaska ---------- 193-298

Grantz, Arthur, Zietz, Isidore, and Andreasen, G. E. An aeromagnetic reconnaissance of the Cook Inlet Area, Alaska ---------- 198-278
See also Moore, J. G.

Grashchenko, S. M. See Sobotovich, E. V., and Starik, I. Ye.

Gratsianova, O. P. See Kalinin, N. A.

Gratsinskiy, V. G. Distortions of spectrums of seismic pulses during analysis ---------- 198-314
—— Kinematic characteristics of the wave picture in ultrasonic logging of boreholes ---------- 203-320
—— Spectrum of a segment of a sinusoid ---------- 197-115

Grau, G. See Agard, J., Bois, Pierre, and Fail, J. P.

Gravelle, Michel. See Eberhardt, Peter.

Graystone, Peter, and Langleben, M. P. Ring tensile strength of sea ice ---------- 202-301

Abstract

Grebennikov, G. M. See Molochnov, G. V.
Green, A. W., Jr., and List, B. H. The use of total-field magnetometer in the magnetotelluric method of vertical resistivity profiling 196-101
Green, D. H., and Ringwood, A. E. Mineral assemblages in a model mantle composition 196-266
Green, Ronald. Tasmanian records of earthquake T-phase from New Zealand 195-63
—— The hidden layer problem 195-319
Green, Ronald, and Steinhart, J. S. On crustal structure deduced from seismic time-distance curves 195-64
See also Steinhart, J. S.
Green, W. D., and Damon, P. E. Age of Cornwall, Pennsylvania, magnetite ore 197-12
Greene, G. W. See Lachenbruch, A. H.
Greenhouse, J. P. Geophysics, summer 1962 200-150
Greenland, L. P., and Lovering, J. F. Selective volatilization from tektites 196-55
—— The evolution of tektites: elemental volatilization in tektites 199-41
Greenshpan, M. See Freier, S.
Gregg, D. R. The tectonic setting of the Tongariro volcanoes, New Zealand 195-356
Gregory, A. R. See Wyllie, M. R. J.
Grenet, Gaston. See Launay, L.
Gretener, P. E. F. An analysis of observed time differences between conventional and continuous logging in borehole investigations 202-277
Gridnev, D. G. See Pariyskiy, N. N.
Griffin, J. B. See Crane, H. R.
Griffiths, D. H., King, R. F., and Rees, A. I. The relevance of magnetic measurements on some fine grained silts to the study of depositional process 194-276
Griggs, D. T., and Handin, John. Observations on fracture and a hypothesis of earthquakes 195-60
Griggs, D. T., Paterson, M. S., Heard, H. C., and Turner, F. J. Annealing recrystallization in calcite crystals and aggregates 195-331
Griggs, D. T., Turner, F. J., and Heard, H. C. Deformation of rocks at 500° to 800° C 195-332
Grigorovich, M. B. On combined appraisal of deposits of construction materials and features of their exploration 200-182
Grigor'yants, B. V. Some problems of the geologic interpretation of local gravity anomalies 202-154
Grinberg, I. V., Petrikovskaya, M. Ye., and Aref'yev, N. V. Investigation of the chemical-genetic and isotopic ratios of the gas-condensate hydrocarbons of the Carpathian region 197-224
Grindley, G. W. Application of geophysics to thermal power projects in New Zealand 195-327
Grinenko, L. N. See Godlevskiy, M. N.
Grinenko, V. A. See Vinogradov, A. P.
Gringorten, I. I. A plotting rule for extreme probability paper 196-204
Griscom, Andrew, and Larrabee, D. M. Aeromagnetic interpretation and preliminary geology of the Danforth area, Maine 202-234
See also Jespersen, Anna.
Grjebine, Tovy. Accumulation of cosmic dusts on the Earth 201-42
Grodzenskiy, V. A., and Lev, I. S. The PKG-2 composite geophone grouping attachment 199-334
Grommé, C. S. See Currie, R. G.
Gronwald, Walther. Is our North Sea coast rising or sinking 192-191
Gross, W. H. See Shima, Makoto.
Grosse, Siegfried, Oelsner, Christian, and Bremer, Hans. On the gravimetric survey of the Vogtland and the Erzgebirge 192-229

Abstract

Groten, Erwin. Calculation of the effect of ocean tides on the registration of earth tides in Neunkirchen, Siegerland ---------- 201-91
— The effect of the free oceans on the determination of the behavior of the Earth's crust from horizontal pendulum measurements ---------- 199-71
Grubbs, D. K. See White, D. E.
Grudeva, N. P. On the use of nonlinear traces in the grouping of seismographs ---------- 193-330
Grumbkov, A. P., and Marin-Fedorov, S. F. Beta-measurements in petroleum prospecting ---------- 199-287
Grumbkov, A. P., Vlinov, M. N., and Marin-Fedorov, S. F. Automobile radiometer-analyzer with coincidence circuit and its use for radiometric surveys ---------- 199-282
Grünenfelder, Marc, and Hafner, Stefan. Age and origin of the Rotondo granite ---------- 203-13
Grushinskiy, N. P., and Sagitov, M. U. Some considerations concerning the gravity field of the Moon ---------- 196-64
See also Chesnokova, T. S.
Gryglewicz, Zofia. Seismic activity in the year 1958 ---------- 197-67
— Seismic activity in the year 1960 ---------- 193-68
Gryglewicz, Zofia, and Skoczek, Hanna. Seismic activity in 1959 -- 193-69
Gryn', M. Ye. The spectrum of reflection coefficient from a pack of layers ---------- 194-101
Gryzlov, V. S. Geophysical methods of determining the thicknesses and quality of coals in calculating reserves (summary) ---------- 200-146
Guardia, Pierre. See Glangeaud, Louis.
Guberman, Sh. A. The technique of determining the time constant for instruments having thermal inertia ---------- 197-322
Guberman, Sh. A., and Kozhevnikov, D. A. Restoration of the actual rules of variation of fields according to integral characteristics ---------- 202-110
See also Yakubson, K. I.
Gubin, I. Ye. See Savarenskiy, Ye. F.
Gubkin, Yu. V. A ruler for analyzing registrations of the transient process of the electromagnetic field ---------- 199-98
Gudelis, V. K. Latest and recent vertical Earth crust movements and the morphology of the sea-coast of the East Baltic area ----- 194-191
See also Lesis, I. P.
Gueben, G. See Cuypers, M., and Duquesne, H.
Gugunava, G. Ye. See Chernyavskiy, G. A.
Guillou. R. B. Galveston Area ---------- 196-316
Gulin, Yu. A., Semenov, Ye. V., Semenova, T. M., Bernshteyn, D. A., and Kupovykh, P. N. New radioactivity logging instruments ---------- 199-290
Gunenko, V. I., Slivkov, V. I., and Sheptunov, V. I. Effectiveness of geophysical logging and geochemical investigations in the productive sediments of the West Tebuk field ---------- 194-160
Gunst, R. H., and Engdahl, E. R. Progress report of USC and GS hypocenter computer program ---------- 198-67
Gupta, R. N., and Bhattacharya, P. K. Unipole method of electrical profiling ---------- 203-149
Gurari, F. G. See Rostovtsev, N. N.
Gurariy, G. Z., and Solov'yeva, I. A. Preliminary data on the density of the substance of the Earth's mantle ---------- 193-255
Gurevich, B. L., and Goncharova, T. A. On the effectiveness of the use of the seismic reflection method on the Tarkhankut Peninsula ---------- 203-323
Gurevich, G. I., Nersesov, I. L., and Kuznetsov, K. K. On the law of earthquake recurrence inferred from regularities of deformation and crushing ---------- 196-114
See also Vasil'yev, Yu. I.

Abstract

Gurevich, V. F. Attempt to apply radiogeodesy in marine geophysical surveying ---- 199-133
Gurevich, Yu. M., and Kononenko, I. I. On the results of radiowave penetration between boreholes in the deposits of the Central Urals ---- 201-136
Gurney, R. D. See Lehner, F. E.
Gurvich, I. I., and Chzhao, Bin. On the dependence of the amplitude of seismic vibrations on charge weight ---- 199-315
Gurvich, I. I., and Glogovskiy, V. M. On ways of increasing the accuracy of the calculation of inhomogeneity of the upper layers in seismic surveying ---- 203-316
 See also Gil'bershteyn, P. G.
Gusak, M. T. See Savinskiy, K. A.
Gusev, B. V. Causes of the negative magnetic anomalies of the Maymecha-Kotuy region ---- 199-241
Gusev, Yu. M. See Serbulenko, M. G.
Guseva, A. A., and Marmorshteyn, L. M. Relation of electrical resistivity of sedimentary rocks to the values of porosity and permeability ---- 196-189
Gushenko, I. I. Character of partial pressure of oxygen in the conduit of Bezymyannyy Volcano in the eruption process ---- 197-353
Gussow, W. C. Energy source of intrusive masses ---- 201-176
Gutdeutsch, R. On multiple arrivals of elastic waves on layers ---- 193-110
Gutenberg, Beno. Rheological problems of the Earth's interior ---- 194-109
Gutierrez Diez, J. L. See Sell Cantalapiedra, J. I.
Guzanova, I. G. See Komarov, S. G., and Petrosyan, L. G.
Gvin, V. Ya. Features of the use of morphometry in structural-tectonic regionalization ---- 198-138
Gvizd', D. I., and Platonenkov, A. N. Experimental investigations by magnetotelluric profiling in the Ust-Yenisei basin ---- 199-58
Gzelishvili, I. A. See Medvedev, S. V.
Gzovskiy, M. V. A physical theory of formation of tectonic fractures ---- 196-216
—— Recent tectonics and geophysics of the Tien Shan ---- 195-170
—— The modeling of tectonic processes ---- 196-220
—— Volcanism and tectonics ---- 202-125
Gzovskiy, M. V., Gorshkov, G. P., and Shenkareva, G. A. A variant of the comparison of seismicity with tectonics of Hungary ---- 193-70
Gzovskiy, M. V., Krestnikov, V. N., Leonov, N. N., Rezanov, I. A., and Reyzner, G. I. The map of recent tectonic movements in central Asia ---- 194-195

H

Haalck, Hans. The aneroid sea gravimeter ---- 201-203
Hackman, R. J. Isotonal map ---- 200-69
—— Stratigraphy and structure of the Apennine region of the Moon ---- 200-63
Hadikoesoemo, Djajadi. On the classification of dangerous volcanoes in Indonesia ---- 203-356
Haefeli, Robert. Observations in ice tunnels and flow law of ice ---- 201-195
Hafner, St[efan], Hartmann, P., and Laves, F. Magnetic core resonance of Al-27 in adularia ---- 199-204
 See also Grünenfedler, Marc, and Rybach, Ladislaus.
Hagedoorn, J. G. In pursuit of the errant seismic pulse ---- 195-315
Hager, R. V., Jr. See Handin, John.
Hagiwara, Takahiro, and Kasahara, Keichi. On aftershocks accompanying the Imaichi earthquake, December 26, 1949 ---- 203-82
Hagiwara, Takahiro; Iwata, Takayuki; Maeda, Yoshihiro; and Kayano, Ichiro. Aftershocks of the Northern Miyagi earthquake, April 30, 1962, observed at the Tsukuba Station ---- 196-110
Hagiwara, Yukio. The terrain correction of gravity data by IBM 7070 ---- 198-180

Abstract

Hajnal, Z. See Hall, D. H.
Hakoda, A. Historical records of tsunami on Shikoku Island and vicinity 193-90
Hakura, Y., and Lincoln, J. V. A suggestion for improving forecasts of geomagnetic storms 198-240
  See also Nagai, M.
Haldemann, E. G. An earthquake effect at Nyaza salt mines, Uvinza, Western Province 192-49
Hales, A. L. See Harkrider, D. G., and Zijl, J. S. V. van.
Hall, C. A., Jr. Displaced Miocene molluscan provinces along the San Andreas Fault 197-184
Hall, D. H., and Hajnal, Z. The gravimeter in studies of buried valleys 196-238
Hall, S. H. The modulation of a proton magnetometer signal due to rotation 195-242
Hall, W. E. See Friedman, Irving.
Hallam, A. Major epeirogenic and eustatic changes since the Cretaceous and their possible relationship to crustal structure 199-142
Haller, John, and Kulp, J. L. Absolute age determinations in East Greenland 193-12
  See also Kulp, J. L.
Hallgren, D. See Hemenway, C. L.
Hallof, P. G., Schultz, R., and Bell, R. A. Induced polarization and geological investigations of the Ballyvergin copper deposit, County Clare, Ireland 194-138
Halpern, Martin. Potassium-argon dating of plutonic bodies in Palmer Peninsula and southern Chile 196-12
Hamachi, Tadao, and Sakamaki, Yukio. On the uranium occurrence associated with manganese ore deposits in the Uwajima area, Ehime Prefecture 198-298
Hamada, Kazuo, and Tazime, Kyozi. Transition from dispersive Rayleigh waves to sound waves in a layer overlying a liquid half space (3) 201-100
  See also Tazime, Kyozi.
Hamilton, E., Harland, W. B., and Miller, J. A. Isotopic ages from some Spitsbergen rocks 194-19
Hamilton, E. I., and Deans, T. Isotopic composition of strontium in some Africa carbonatites and limestones and in strontium minerals 202-198
Hamilton, E. I., Dodson, M. H., and Snelling, N. J. The application of physical and chemical methods to geochronology 200-1
Hamilton, N. Susceptibility anisotropy measurements on some Silurian siltstones 195-280
Hamilton, R. G. Recent advances in logging and interpretation 193-145
Hamilton, W. B. Tectonics of Antarctica 201-181
Hamilton, W. B., and Hayes, P. T. Structure of lower Taylor Glacier, South Victoria Land, Antarctica 192-192
Hammer, Sigmund. Deep gravity interpretation by stripping 201-197
—— Rock densities and vertical gradient of gravity in the Earth's crust 195-184
Hammons, R. H. See Brod, R. J.
Handin, John, Hager, R. V., Jr., Friedman, Melvin, and Feather, J. N. Experimental deformation of sedimentary rocks under confining pressure: Pore pressure tests 200-342
Handin, John, Higgs, D. V., and O'Brien, J. K. Torsion of Yule marble under confining pressure 195-337
  See also Borg, Iris, and Griggs, D. T.
Hankins, D. M. Observations from some GNOME seismograms 195-102
Hantke, Gustav. Survey of volcanic activity, 1957-59 202-334
Hapke, B. W. A theoretical photometric function for the lunar surface 202-42

Abstract

Hapke, B. W., and Van Horn, Hugh. Photometric studies of complex surfaces, with applications to the Moon ---- 202-41
Harada, Yoshimichi, Kakinuma, Seiichi, and Murata, Ichiro. Pendulum determination of the gravity differences between Tokyo, Mowbray, and Syowa Base ---- 202-159
Haramura, Hiroshi. See Murayama, Sadao.
Hargraves, A. J. See Radmanovich, Max.
Hargraves, R. B. Shatter cones in the rocks of the Vredefort Ring- 200-59
Harkrider, D. G., Hales, A. L., and Press, Frank. On detecting soft layers in the mantle with Rayleigh waves ---- 198-207
Harland, W. B. See Hamilton, E., and Miller, J. A.
Harms, Gunter, Blanc, Claude, Espagno, Lucien, and Blanc, Daniel. Variations of the isotopic composition of potassium of different origins ---- 196-273
Harris, P. G. Increase of temperature in ascending basalt magma- 194-219
See also Gass, I. G.
Harrison, J. C. A note on the paper "Earth-tide observations made during the International Geophysical Year" ---- 198-88
—— An analysis of the lunar tides ---- 202-40
Harrison, J. C., Ness, N. F., Longman, I. M., Forbes, R. F. S., Kraut, E. A., and Slichter, L. B. Earth-tide observations made during the International Geophysical Year ---- 198-87
Harrison, J. C., and Spiess, F. N. Tests of the LaCoste and Romberg surface-ship gravity meter II ---- 198-181
See also Caputo, Michele.
Hart, S. R. See Aldrich, L. T., Doe, B. R., and Tilton, G. R.
Hartline, R. E. See Duesterhoeft, W. C., and Stick, J. C., Jr.
Hartmann, P. See Hafner, Stefan.
Hartz, T. R. See Ortner, J.
Hasegawa, Kiyoshi. Study on the time variation of the earth electric field. Parts I and II ---- 199-59
—— Study on the time variation of the earth electric field, part III -- 202-52
Hasegawa, Sadao. See Ishizawa, Kaoru.
Hashizume, Akira. See Tendow, Yoshihiko.
Haskell, N. A. Crustal reflection of plane P and SV waves ---- 194-95
—— Radiation pattern of Rayleigh waves from a fault of arbitrary dip and direction of motion in a homogeneous medium ---- 198-69, 199-74
Haskin, Larry, and Gehl, M. A. Rare-earth elements in tektites -- 197-53
Hasselmann, K. A statistical analysis of the generation of microseisms ---- 202-251
Hatherton, T., and Evison, F. F. A special mechanism for some Antarctic earthquakes ---- 196-121
Hatori, Tokutaro. Directivity of tsunamis ---- 203-100
—— On the tsunamis along the Island of Hawaii ---- 203-99
See also Takahasi, Ryutaro.
Haubrich, R. A., Munk, W. H., and Snodgrass, F. E. Comparative spectra of microseisms and swell ---- 195-308
Hawkes, D. D. See McDougall, Ian.
Hawkins, D. R. See Johnson, R. W., Jr.
Hawkins, Daniel. See Anderson, L. A.
Hawkins, G. S. A study of tektites ---- 196-54
—— Impacts on the Earth and Moon ---- 199-37
—— Radar determinations of meteor orbits ---- 196-39
Hawkins, L. V. Discussion on the problem of the hidden layer within the blind zone ---- 196-323
—— On techniques with seismic interval timers ---- 194-325
Hawkins, L. V., and Maggs, D. Nomograms for determining maximum errors and limiting conditions in seismic refraction survey with a blind-zone problem ---- 196-330
Hay, R. L. Soda-rich sanidine of pyroclastic origin from the John Day formation of Oregon ---- 196-7

Abstract

Hay, R. L. Stratigraphy of Beds I through IV, Olduvai Gorge, Tanganyika 199-9

Hayakawa, Masami. Geophysical investigation for magma 196-354
— Geophysical structures of geothermal area 203-224

Hayakawa, Masami, and Mori, Kiyoshi. Seismic prospecting at Matsukawa geothermal area, Iwate Prefecture 198-344

Hayase, Ichikazu. See Aldrich, L. T.

Hayashi, Hajime. Studies on the geophysical methods for oil exploration in Japan 202-160

Hayashi, Shoichiro, and Igarashi, Toshio. Report on the radiometric survey in Seta-gun, Gumma Prefecture 198-295

Hayashi, Shoichiro, and Maruyama, Shuji. Report on the radiometric survey in Nishichikuma-gun, Nagano Prefecture 198-296
See also Bojo, Toshiatsu.

Hayes, P. T. See Hamilton, W. B.

Hazelwood, R. M. See Black, R. A.

Heacock, J. G. See Pickell, J. J.

Heacock, R. R. Notes on pearl-type micropulsations 195-257

Heacock, R. R., and Hessler, V. P. Pearl-type telluric current micropulsations at College 192-42
— Telluric current micropulsation bursts 198-53
See also Flock, W. L., and Hessler, V. P.

Healey, D. L., and Miller, C. H. Gravity survey of the Gold Meadows stock, Nevada Test Site, Nye County, Nevada 201-207

Healy, James. Structure and volcanism in the Taupo Volcanic Zone, New Zealand 202-317
— The broad approach to volcanic prediction 203-361

Heard, H. C. Effect of large changes in strain rate in the experimental deformation of Yule marble 198-345
— Transition from brittle fracture to ductile flow in Solenhofen limestone as a function of temperature, confining pressure, and interstitial fluid pressure 195-335
See also Griggs, D. T.

Hédervári, Péter. A new classification of the volcanic eruptions 193-356
— Volcanic bombs from the Moon? 201-57

Hedge, C. E., and Walthall, F. G. Radiogenic strontium-87 as an index of geologic processes 200-244
See also Shields, W. R.

Heezen, B. C. The rift valley on the ocean floor 198-358
See also Hurley, P. M., and Talwani, Manik.

Hefferman, J. See Carder, B.

Heier, K. S., and Rogers, J. J. W. Radiometric determination of thorium, uranium, and potassium in basalts and in two magmatic differentiation series 197-309

Heikkilä, K. E. See Hultqvist, Bengt.

Heintz, Natascha. The Nansen Ridge has become the Nansen Trough 203-328

Heintz, Natascha, and Siggerud, Thor. Absolute age determinations on rocks from Dronning Maud Land, Antarctica 202-26

Heiskanen, W. A. On the activity of the Isostatic Institute of the International Association of Geodesy and of the worldwide gravity project of Columbus, Ohio, in physical geodesy 192-173
— Reduction methods of gravity data applied and studied by the Columbus group 192-172
— Some recent gravimetric studies on the isostasy and the thickness of the Earth's crust 198-167

Helbig, Klaus. Some integrals of magnetic anomalies and their relation to the parameters of the disturbing body 201-286

Helfer, M. D. See Caputo, Michele.

Helliwell, R. A., and Carpenter, D. L. Whistlers excited by nuclear explosions 202-218

Abstract

Hemenway, C. L., and Soberman, R. K. Studies of micrometeorites obtained from a recoverable sounding rocket -------------- 193-37

Hemenway, C. L., Soberman, R. K., Fullam, E. F., Balsamo, J. J., Cole, J., Hallgren, D., Yedinak, P., Goodman, A., and Hoff, G. Micrometeorite collection from a recoverable sounding rockett. II -------------- 201-38

See also Soberman, R. K.

Henao-Londoño, Diego. Gravity studies in Sergipe-Alagoas ------- 193-227

Henderson, E. P. See Clarke, R. S., Jr., and Roy, S. K.

Henderson, J. R., Jr., Chandler, E. J., and others. Aeromagnetic map of parts of the Paterson and Orange quadrangles, Essex, Passic, and Bergen Counties, New Jersey -------------- 197-281

—— Aeromagnetic map of the Ramsey quadrangle, Passaic and Bergen Counties, New Jersey, and Rockland County, New York ----- 203-286

Henderson, J. R., Jr., Gilbert, F. P., and others. Aeromagnetic maps of Maine -------------- 199-257

Henderson, J. R., Jr., Johnson, R. W., and Gilbert, F. P. Aeromagnetic map of the Wilmington, Delaware area and adjacent parts of Pennsylvania and Maryland -------------- 199-263

Henderson, J. R., Jr., Smith, C. W., and others. Aeromagnetic map of the Moosehead Lake quadrangle and part of the First Roach Pond quadrangle, Piscataquis and Somerset Counties, Maine -------------- 199-259

Henderson, J. R., Jr., Smith, F. C., and others. Aeromagnetic map of parts of the Monroe and Maybrook quadrangles, Orange County, New York -------------- 203-284

Henderson, J. R., Jr., Tyson, N. S., and Page, J. R. Aeromagnetic map of the Wausau area, Wisconsin -------------- 202-239

Henderson, J. R., Jr., Vargo, J. L., and others. Aeromagnetic map of part of the Dillingham quadrangle -------------- 197-294

Henderson, J. R., Jr., White, B. L., and others. Aeromagnetic map of Long Valley and Northern Owens Valley, California ------ 201-306

See also Andreasen, G. E., and Keller, Fred, Jr.

Henderson, R. G., and Fischer, W. A. Applications of analytical methods to a single microdensitometer trace -------------- 200-68

Hennessy, D. J. See Nagy, Bartholomew.

Heppner, J. P., Ness, N. F., Scearce, C. S., and Skillman, T. L. Explorer 10 magnetic field measurements -------------- 194-241

Heppner, J. P., Skillman, T. L., and Cain, J. C. Contributions of rockets and satellites to the World Magnetic Survey ---------- 192-253

See also Cain, J. C.

Herbst, R. F. See Werth, G. C.

Hermes, H.-J. Application of electrical surveying for planning seismic profiles and for determining the optimum shot depth; Work results from the Bevensen concession -------------- 200-332

Herr, W., Hoffmeister, W., Hirt, B., Geiss, Johannes, and Houtermans, F. G. Attempt at the dating of iron meteorites according to the rhenium-osmium method -------------- 193-34

Herrin, Eugene, and Taggart, James. Regional variations in Pn velocity and their effect on the location of epicenters ----------- 195-99

See also Willmore, P. L.

Herrmann, Friedbert. Observations on radioactivity and fossil content of the Middle Bunter Sandstone southwest of Braunschweig -- 198-293

Hertwig, Gerhard. Ten years of the VEB-Geophysik -------------- 192-150

Hess, H. H. History of ocean basins -------------- 197-180

Hess, W. N. Throwout calculations -------------- 194-59

Hessler, V. P., and Heacock, R. R. Earth currents at the auroral zone - Final report -------------- 199-48

See also Heacock, R. R., and Wescott, E. M.

Abstract

Heymann, D., and Fluit, J. M. Sputtering by 20-Kev Ar^+ ions at normal incidence on meteorites ---------- 193-35

Heymann, D., and Schaeffer, O. A. Constancy of cosmic rays in time ---------- 197-51

Hicks, W. G. Lateral gradient of the variation in velocity in rocks penetrated by a borehole ---------- 202-275

Hieblot, James. See DeWitt, C.

Hieke Merlin, O., and Justin Visentin, E. Study of the accessory components in the rocks of the Gran Paradiso with particular regard to the radioactive minerals ---------- 199-279

Hiersemann, Lothar. Continuous recording of earth movements by a strain seismometer ---------- 194-91

Higdon, W. T. Discussion of "Variation of electrical resistivity of river sands, calcite, and quartz powders with water content" by V. V. J. Sarma and V. B. Rao ---------- 199-114

Higgs, D. V. See Borg, Iris., and Handin, John.

Hilgenberg, O. C. Paleo-pole positions of the Earth ---------- 196-292

—— Rock magnetism and the Earth's palaeopoles ---------- 196-293

Hill, C. R., and Crookall, J. O. Natural occurrence of U-234-enriched uranium ---------- 199-212

Hill, H. J. See Gondouin, M.

Hill, M. E. See Dempsey, W. J.

Hillman, P. See Freier, S.

Hinault, J. Prospecting for radioactive minerals in French Guiana- 200-313

Hines, C. O. The magnetopause: a new frontier in space ---------- 201-245

See also Axford, W. I.

Hinrichs, F. W. See Brod, R. J.

Hinterberger, H., König, H., and Wänke, H. On the helium and neon content of stone meteorites and their radiogenic and cosmogenic age ---------- 197-50

See also König, H., and Voshage, H.

Hinze, W. J. See Secor, G. B.

Hirai, Yoshiro. See Katsui, Yoshio.

Hirasawa, Kiyoshi. On the result of physical measurement for pyrite ore and crystalline schist in the Sazare mine. Especially on the elastic wave velocity ---------- 198-97

Hirayama, Mitsuei. See Iwasaki, Iwaji.

Hiroshi, Ito. See Katsui, Yoshio.

Hirt, Bernhard. See Ferrara, Giorgio, and Herr, W.

Hirtz, J. M. See Denozière, P.

Hirvonen, R. A. Interpolation and integration of the normal free air anomalies ---------- 192-206

—— On the statistical analysis of gravity anomalies ---------- 198-163

—— The reformation of geodesy ---------- 192-175

Hisamoto, S., and Murayama, C. Drawing the wave fronts of the Chilean tsunami of May 23, 1960 ---------- 192-92

Ho, C. D. See Tseng, C. S.

Hoadley, F. C., and Allen, B. W. Electric log interpretation with the IBM 650 computer ---------- 192-141

Hobbs, H. A., Cutcliffe, J. L., and Kingery, W. D. Effect of creep and temperature gradients on long-time deformation of ice sheets ---------- 202-304

Hobbs, H. A., and Kingery, W. D. Long-time tests of sea ice sheet deformation ---------- 192-350

Hodge, P. W., and Wright, F. W. The space density of atmospheric dust in the altitude range 50,000 to 90,000 feet ---------- 196-48

Hodgson, J. H., and Langill, F. E. Bibliography of seismology --- 194-89

Hoeppener, Rolf. Problems of physical tectonics. Elastic stresses and friction stresses ---------- 201-178

Hoff, G. See Hemenway, C. L.

Abstract

Hoffmann, R. A., Davis, L. R., and Williamson, J. M. Protons of 0.1 to 5 Mev and electrons of 29 kev at 12 earth radii during sudden commencement of September 30, 1961 -------------------- 194-26
Hoffmann, W. F. See Dicke, R. H.
Hoffmeister, W. See Herr, W.
Hoffrén, V. See Hyyppä, E.
Holden, John. See Bushee, Jonathan.
Holdgate, M. W. The eruption of Tristan da Cunha, 1961-62 ------ 193-360
See also Gass, I. G.
Holgate, Norman. The Cabot and Great Glen faults -------------- 197-182
Holīzdra, H. Ya. On the use of limiting mass distributions for the solution of problems of gravity surveying -------------------- 197-199
Holland, H. D. Model for the evolution of the Earth's atmosphere -- 197-169
Holmes, Arthur. 'Absolute' age: a meaningless term ------------- 197-1
Holmes, C. R. See Sanford, A. R.
Holt, O. See Ortner, J.
Holub, Karel, and Christoskov, Ludmil. Short-period noise at the seismic station in Sofia ------------------------------------ 198-83
Holzman, Mark. Chebyshev optimized geophone arrays ----------- 198-319
Homilius, Joachim. On the evaluation of geoelectric soundings in the case of a multilayered ground ----------------------------- 193-126
Homola, Vladimīr, and Müller, Karel. Geological and geophysical contribution to proof of the thrust structure of the south Slovakian karst -- 193-301
Honda, Hirokichi. Earthquakes, mechanism and seismic waves --- 198-71, 203-80
Honda, Masatake, and Arnold, J. R. Radioactive species produced by cosmic rays in the Aroos iron meteorite ------------------ 192-24
See also Arnold, J. R., Shima, Makoto, and Stauffer, Heinz.
Hones, E. W., Jr. Motions of charged particles trapped in the Earth's magnetosphere ------------------------------------- 197-241
Honfi, Ferenc, and Lakatos, Sándor. On the theory, practice, and possibilities of single-electrode well logging ------------------ 198-113
Honkasalo, Tauno. Gravity survey of Finland in the years 1945-1960 --- 197-208
Honsho, Shizumitsu. Elastic waves in a plate (model experiment) -- 192-115
Hood, P. J. Remanent magnetism - a neglected factor in aeromagnetic interpretation -------------------------------------- 199-247
Hook, J. L. See Ortner, J.
Hopson, C. A., Waters, A. C., Bender, V. R., and Rubin, Meyer, The latest eruptions from Mount Rainier Volcano --------------- 193-359
Horai, Ki-iti. Recent progress in heat flow measurements and magnetic survey in the oceanic areas ------------------------ 201-218
—— Studies of the thermal state of the Earth. The tenth paper: Terrestrial heat flow measurements in Tohoku district, Japan --- 203-221
—— Studies of the thermal state of the Earth. The eleventh paper: Terrestrial heat flow measurements in Kyushu district, Japan --- 203-222
—— Studies of the thermal state of the Earth. The twelfth paper: Terrestrial heat flow measurements in Hokkaido district, Japan - 203-223
Horai, Ki-iti, and Uyeda, Seiya. Terrestrial heat flow in Japan --- 203-218
See also Uyeda, Seiya.
Hordejuk, Józef. See Bóbr-Modrakowa, Irena, and Droste, Zofia.
Hori, Minoru. See Miyamura, Setumi.
Horibe, Yoshio. See Craig, Harmon.
Horn, M. K. COMLOG - a comprehensive computer system for log interpretation --- 201-165
Horne, J. E. T. See Darnley, A. G.
Horová, Milena. See Beránek, Břetislav.
Horst, Wolfgang. See Adler, Gerhard.

Abstract

Horwood, J. L. A graphical determination of uranium and thorium in ores from their gamma-ray spectra ---------------------- 193-307
Hoshino, Kazuo. See Sato, Yoshiaki.
Hoshino, Michihei. See Sato, Takahiro.
Hoskins, Hartley. See Jamieson, J. C.
Hotchkiss, Henry. Petroleum developments in Middle East and adjacent countries in 1961------------------------------------ 192-154
Housner, G. W. An engineering report on the Chilean earthquakes of May 1960 --Preface------------------------------------ 197-86
— The behavior of inverted pendulum structures during earthquakes -- 197-92
— The dynamic behavior of water tanks ---------------------- 197-90
Houtermans, F. G. See Herr, W.
Houtermans, H. See Jaeger, R. G.
Howard, J. See Secor, G. B.
Howell, B. F., Jr. Absorption of seismic waves in rock--------- 193-115
— Geophysical studies of the Appalachian area ----------------- 195-135
Hower, J., Hurley, P. M., Pinson, W. H., and Fairbairn, H. W. The dependence of K-Ar on the mineralogy of various particle size ranges in a shale ------------------------------------ 201-2
Hoy, R. B. Induced faulting -------------------------------- 203-148
Hoyer, W. A. Induced nuclear reaction logging ----- ------------ 193-319
Hradilek, Ludvík. Determination of the relative deflections of the vertical and the coefficient of refraction in the adjustment of trigonometrically measured altitude networks ---------------- 193-170
Hsu, Ichi, Orientation of drill-core samples by remanent magnetization method -- 201-279
Hsu, K. J., Edwards, George, and McLaughlin, W. A. Age of the intrusive rocks of the southeastern San Gabriel Mountains, California-- 200-15
Hsu, M.-T. Seismicity of Taiwan (Formosa) ------------------ 192-80
Huang, Y. T. Analytical study of a new seismic sensor, gyro-seismometer --- 203-108
Hubbard, D. H. See Macdonald, G. A.
Hubbard, H. A. See Ford, A. B.
Hubbs, C. L., Bien, G. S., and Suess, H. E. La Jolla natural radiocarbon measurements III ---------------------------------- 203-34
Huckabay, W. B. See Shor, G. G., Jr.
Hudson, D. E. The measurement of ground motion of destructive earthquakes -- 197-93
Hudson, J. A. SH waves in a wedge-shaped medium ------------- 203-130
Hughes, E. E. See Mann, W. B.
Hughes, H. See Hurley, P. M.
Huhta, Jussi. Shallow seismic experiments in Kolari ------------ 203-322
Huizenga, J. R. See Bate, G. L.
Hulley, J. C. L. Correlation between gravity anomalies, transcurrent faults and pole positions ---------------------------- 201-172
Hulston, J. R., and Beauchamp, Jeanette. Sulphur isotopic variations in nature. Pt. 9. A recomparison of the New Zealand sulphur standard with the meteoritic sulphur standard ------------ 200-241
Hultqvist, Bengt, Thunberg, A., Lindell, S., and Heikkilä, K. E. An automatic digital recording and reducing system for geomagnetic standard data ------------------------------------ 198-226
See also Ortner, J.
Hunt, C. B. Tectonic framework of southwestern United States and possible continental rifting -------------------------------- 201-182
Hunt, Graham. Time of Purcell eruption in southeastern British Columbia and southwestern Alberta -------------------------- 194-12
Hunt, J. M. See Hurley, P. M.
Hunter, D. R. See Allsopp, H. L.

Abstract

Hunter, W. See Parkin, D. W.
Hunziker, E. See Kobold, F.
Hurley, J. See Bazer, J.
Hurley, P. M., Heezen, B. C., Pinson, W. H., and Fairbairn H. W. K-Ar age values in pelagic sediments of the North Atlantic 201-1
Hurley, P. M., Hughes, H., Faure, G., Fairbairn, H. W., and Pinson, W. H., Jr. Radiogenic strontium-87 model of continent formation 197-10
Hurley, P. M., Hunt, J. M., Pinson, W. H., Jr., and Fairbairn, H. W. K-Ar age values on the clay fractions in dated shales 200-5
  See also Bailey, S. W., Beall, G. H., Faure, G., and Hower, J.
Hurley, R. J., Siegler, V. B., and Fink, L. K., Jr. Bathymetry of the Straits of Florida and the Bahama Islands, Pt. I. Northern Straits of Florida 197-349
Hurwitz, Louis. See Nelson, J. H.
Husid L., Raul. See Arias S., Arturo.
Hussein, H. A. M. Radiogeologic study of the region located to the north of Nantes (Loire-Atlantique) 197-306
Hutchinson, R. O., and Shuman, B. M. Magnetic measurements with sounding rockets 200-251, 201-251
Hutton, V. R. S. The disturbance daily variation of the Earth's field near the magnetic equator 200-260
—— The S variation of earth currents near the magnetic equator, its seasonal changes, and its relation to variations of the magnetic field 200-74
—— The solar and lunar daily variations of earth currents near the magnetic equator 194-66
Hwang, Yen-hu, and Stegena, Lajos. On the seismometer-ground vibrational system 192-334
Hyndman, R. D. Gravity survey, summer 1962 199-174
Hyyppä, E., Isola, A., and Hoffrén, V. Geological Survey of Finland radiocarbon measurements II 203-37

I

Ichikawa, M. Statistical investigation of earthquake mechanism in Kwanto district 202-61
Idenbom, V. L., and Orlov, A. N. Physical theory of plasticity and strength 195-340
Igarashi, Toshio. See Hayashi, Shoichiro.
Igoshin, B. A. Experience of geophysical work in the chalcopyrite deposits of the Uchalin ore region 202-108
Iida, Kumizi. Conclusion of symposium on the mechanical properties of rocks, and some considerations on the occurrence of earthquakes 202-64
—— General discussion on the mechanical properties of rocks and rock creep 202-294
Iijima, T. See Nagata, Takesi.
Il'ina, V. I. See Komarov, A. G.
Indans, A. P. On some problems of the development of old local structures in Latvia in recent time 195-159
Indian Journal Meteorology and Geophysics. Solar, geomagnetic, ionospheric and ozone data 197-239
Ingram, J. D. See Levin, F. K.
Ingram, R. E. Focal mechanism of couples without moment 203-79
Institute of Petroleum Review. Seismic exploration in Qatar 198-333
Instituto Geologico y Minero de España. Geophysics 195-121
International Geophysical Bulletin. Correlation of magnetic field fluctuations at the Earth and in interplanetary space 203-254

Abstract

nternational Geophysical Bulletin. Explorer X magnetic field measurements ---- 203 249
—— International Geophysical Calendar for 1963 ---- 198-147
—— Provisional programme, International Years of the Quiet Sun, 1964-65 ---- 198-233
—— Rocket, satellite, and space-probe measurements of interplanetary dust ---- 193-38
—— The Upper Mantle Project ---- 194-222
—— The Upper Mantle Project: proposed contributions of the U. S. Geological Survey and U. S. Coast and Geodetic Survey ---- 198-206
—— The Year of the Quiet Sun. The proposed programs of Austria and Japan ---- 192-159
—— The Year of the Quiet Sun. The proposed programs of Belgium, Czechoslovakia, Finland, and France ---- 192-157
—— The Year of the Quiet Sun. The proposed programs of India and South Africa ---- 201-253
—— The Year of the Quiet Sun. The proposed programs of the Netherlands and New Zealand ---- 194-245
—— The Year of the Quiet Sun. The proposed programs of the USSR ---- 192-158
—— The Year of the Quiet Sun, United Kingdom program ---- 201-254
odko, V. K. See Vvedenskaya, N. A.
onin, A. S. See Budanov, V. I.
onov, V. A. See Balyasnyy, N. D., and Boltneva, L. I.
onychev, N. N. Comparative characteristics of electrodynamic and photoelectric seismic tiltmeters ---- 203-116
See also Ostrovskiy, A. Ye.
Irving, E. An analysis of the positions of the Earth's magnetic pole in the geological past ---- 196-290
—— Palaeomagnetic directions and pole positions, part 5. Numbers 5/1 to 5/95 ---- 196-294
—— Paleomagnetism of the Narrabeen Chocolate shales and the Tasmanian dolerite ---- 198-267
Irving, E., and Briden, J. C. Palaeolatitude of evaporite deposits- 193-292
Irving, E., and Gaskell, T. F. The palaeogeographic latitude of oil-fields ---- 195-284
Irving, E., and Parry, L. G. The magnetism of some Permian rocks from New South Wales ---- 201-284
Irving, E., Robertson, W. A., and Stott, P. M. The paleomagnetism of some Mesozoic rocks from eastern Australia--preliminary remarks ---- 198-266
—— The significance of the paleomagnetic results from Mesozoic rocks of eastern Australia ---- 198-270
Isaacson, E. de St. Q. Rock pressure in mines ---- 199-351
Isabayev, Ye. A. See Cherdyntsev, V. V.
Ishida, Tamotsu. Propagation of elastic waves in sea ice ---- 199-82
Ishii, Fujio. See Kunori, Soichi.
Ishii, Yoshinori. A model study of diffraction waves ---- 202-86
Ishikawa, Toshio, and Katsui, Yoshio. Some considerations on the relation between chemical character and geographical position of the volcanic zones in Japan ---- 195-355
Ishikawa, Yoshikazu, and Syono, Yasuhiko. Order disorder transformation and reverse thermo-remanent magnetism in the $FeTiO_3$-Fe_2O_3 system ---- 200-279
—— Reverse thermo-remanent magnetism in the $FeTiO_3$-Fe_2O_3 system ---- 197-264
Ishizawa, Kaoru; Wakai, Noboru; Hasegawa, Sadao; and Kawajiri, Nobuhiro. Measurement of atmospheric radio noise on 2.5 Mc/s on board the Antarctic Research Expedition ship "Soya" ---- 196-283
Ishutin, V. V. Geology and oil-gas potential of the North Ustyurt downwarp ---- 199-118

Abstract

Iskanderova, A. D. See Mirkina, S. L.
Islamov, K. Sh. See Bagdasarova, A. M.
Isola, A. See Hyyppä, E.
Isotov, A. A. On a remark concerning the Krassovskiy ellipsoid --- 201-169
Isräel, G. W. Measurement of the annual course of tritium in rain in 1960-61 according to isotopic enrichment in the separating tube --- 195-229
Isräel, Hans, Björnsson, S., and Stiller, Siegfried. Emanometric measurements of radon and thoron in soil air --- 192-314
Isräel, Hans, and Stiller, Siegfried. Climatological aspects of the natural radioactivity --- 201-311
Istratov, V. V. See Kuteynikov, Ye. S.
Itsikson, M. I., and Krasnyy, L. I. Geotectonic features of the distribution of the Mesozoic and Cenozoic volcanogenetic formations in the Far Eastern Region --- 202-138
Ivakin, B. I., and Aver'yanov, A. G. Modeling of seismic waves in layered-inhomogeneous mediums on two dimensional perforated models --- 203-141
Ivakin, B. N., and Vasil'yev, Yu. F. Wave properties of perforated plates for seismic modeling --- 201-109
Ivankin, V. P. On the nonlinearity of radioactivity logging apparatus --- 199-306
Ivanov, A. A. Control of the relative intensity of reflected waves --- 199-326
—— On the calculation of the amplitude of multiple reflections in seismic surveying --- 202-268
—— Structure of the northern end of the Vyatskiy swell in the light of geophysical data --- 197-162
Ivanov, A. G. Electrical exploration in areas of petroleum prospecting in China --- 193-139
Ivanov, D. N. Subdivision of the medium-grained granites of the Gul'shad deposit (central Kazakhstan) according to the results of quantitative mineralogical analysis and radiometric observations --- 196-309
Ivanov, Iv. See Alekseyev, El.
Ivanov, K. G. On the height of the explosion of the Tungus meteorite --- 201-32
—— Regularities in the morphology of sudden commencements of magnetic storms --- 195-272
—— The cause of successive changes of the field in the geomagnetic effect of the Tunguska meteorite --- 200-57
—— The influence of electric currents induced in the Earth on the form and magnitude of midnight SC magnetic storms --- 203-261
Ivanov, M. M. On the anomalous magnetic field in the Atlantic and Indian Oceans --- 195-306
—— The secular variation of the magnetic field in the Atlantic and Indian Oceans --- 200-258
Ivanov, N. A., and Men'kov, V. N. An induction ballistic device for measuring the magnetic susceptibility and remanent magnetization of rock samples --- 201-275
Ivanov, N. N. See Ryss, Yu. S.
Ivanov, S. I. The radioseismic station --- 194-331
Ivanov, V. I. See Cherdyntsev, V. V.
Ivanov, V. V. Hydrothermal resources of areas of recent volcanism --- 202-348
Ivanov, Yu. A., and Yarushevskiy, G. A. Use of selective logging on the mercury deposits of southern Fergana and the possibility of changing the existing survey procedure --- 200-318
Ivanova, I. K., and Chernysh, A. P. Absolute age of the upper Paleolithic (Solutréan, Gravettian type) of the region adjoining the Dneister according to data of radiocarbon analysis --- 197-23

Abstract

Ivanova, M. V. See Dobrokhotov, Yu. S.
Ivanova, N. I. See Tagay, Ye. D.
Ivanova, N. P. See Veytsman, P. S.
Ivanova, T. G. See Molotova, L. V., and Vasil'yev, Yu. I.
Ivanova, T. N. Composition and structural position of spilitic and andesite porphyry formations (exemplified by the Cambrian geosyncline of Tuva) 202-135
Ivochkin, V. G. See Veshev, A. V.
Iwanaga, Masaki. See Katsui, Yoshio.
Iwasaki, Bunji. See Iwasaki, Iwaji.
Iwasaki, Iwaji. Geochemical investigations of geyers in Japan 192-360
Iwasaki, Iwaji; Ozawa, Takejiro; Yoshida, Minoru; Katsura, Takashi; Iwasaki, Bunji; and Kamada, Masaakira. Chemical composition of volcanic gases in Japan 202-260
—— Nature of volcanic gases and volcanic eruption 203-345
Iwasaki, Iwaji; Ozàwa, Takejiro; Yoshida, Minoru; Katsura, Takashi; Iwasaki, Bunji; Kamada, Masaakira; and Hirayama, Mitsuei. Volcanic gases in Japan 192-361
Iwata, Takayuki. See Hagiwara, Takahiro.
Iyer, H. M. Nuclear explosions and normal mode oscillations of the Earth 193-120
Iyer, H. M., and Punton, V. W. A computer program for plotting wavefronts and rays from a point source in dispersive mediums 201-80
Izhotova, T. S. Study of the character of the potential of natural polarization in the Miocene carbonate-shaly reservoirs of the Azov-Kuban basin 199-105
Izotov, A. A. On geodetic methods of studying movements of the Earth's crust 203-183
Izsak, I. G. A determination of the ellipticity of the Earth's equator from the motion of two satellites 193-168
—— Tesseral harmonics in the geopotential 203-187
Izutuya, Sadakatu. See Okada, Atusi.

J

Jackson, P. L. Signal enhancement through an ensemble presentation 198-312
Jackson, W. H. See Black, R. A.
Jacobi, W., and André, K. The vertical distribution of radon 222, radon 220 and their decay products in the atmosphere 203-301
Jacobs, J. A., Lokken, J. E., and Wright, C. S. Notation and classification of geomagnetic micropulsations 202-217
Jacobs, J. A., and Watanabe, T. Propagation of hydromagnetic waves in the lower exosphere and the origin of short period geomagnetic pulsations 193-272
See also Nishida, Atsuhiro.
Jacobsen, G. Deep permafrost measurement in North America 1961-62 201-221
Jacobshagen, V., Münnich, K. O., and Vogel, J. C. The age of the Rhünda skull. III. C-14 dating of the layer in which it was found 199-10
Jaeger, J. C. Elasticity, fracture and flow with engineering and geological applications 196-339
Jaeger, J. C., and Cook, N. G. W. Pinching-off and disking of rocks 198-346
Jaeger, J. C., and Sass, J. H. Lee's topographic correction in heat flow and the geothermal flux in Tasmania 199-191
Jaeger, R. G., and Houtermans, H. Comments on the definition of the curie, with special reference to natural radioactive materials 196-307

Abstract

Jäger, Emilie. Rb-Sr age determinations on micas and total rocks from the Alps 196-20
See also Faul, Henry, and Ferrara, Giorgio.
Jahn, A. See Dumanowski, B.
Jain, M. K., and Srinivasan, J. Finite deformations in the interior of the Earth 200-232
James, H. L., and Clayton, R. N. Oxygen isotope fractionation in metamorphosed iron formations of the Lake Superior region and in other iron-rich rocks 197-226
James, Richard, and Kopal, Zdeněk. The equilibrium figures of the Earth and the major planets 200-184
Jamieson, J. C. Possible occurrence of exceedingly high pressures in geological processes 203-326
Jamieson, J. C., and Hoskins, Hartley. The measurement of shear-wave velocities in solids using axially polarized ceramic transducers 200-117
Jankowski, Jerzy, and Królikowski, Czesław. On short-period variations of the Earth's magnetic field in the territory of Poland 197-246
Jardetzky, W. S. Aperiodic pole shift and deformation of the Earth's crust 192-296
Jarosch, H. See Pekeris, C. L.
Jastrow, Robert. The magnetosphere 194-237
Jeffers, P. H. How to correct records for extraneous seismic energy 195-316
Jeffery, P. M. See Butler, W. A.
Jeffreys, Harold. Head waves and the nature of the Mohorovičić discontinuity 201-81
—— Travel times for Pacific explosions 196-168
Jeffreys, Harold, and Sells, Cedric. SH from a source in the lower layer 203-131
Jeletzky, J. A. Pre-Cretaceous Richardson Mountain trough: Its place in the tectonic framework of Arctic Canada and its bearing on some geosynclinal concepts 201-186
Jelgersma, Saskia. A late-glacial pollen diagram from Madelia, south-central Minnesota 194-7
Jellinek, H. H. G. Plastic deformation of thick-walled snow-ice cylinders under hydrostatic pressure 193-347
Jemma, R. J. A. Geophysical prospecting of the uraniferous deposit "Rodolfo" in the Province of Cordoba 195-311
Jenkins, A. W., Jr., and DuVall, B. W. A possible mechanism for magnetic effects from meteors 195-256
Jenkins, E. B. See Beard, D. B.
Jenkins, R. J. See Butler, C. P.
Jenness, S. E. Summary of research 197-158
Jenschke, V. A. See Clough, R. W.
Jensen, M. L. See Dessau, G. J.
Jenssen, D., and Radok, U. Heat conduction in thinning ice sheets 197-189
Jérémine, Elisabeth, Orcel, Jean, and Sandrea, A. P. The Sainte Marguerite meteorite in Comines (Nord) 194-27
Jespersen, Anna, and Griscom, Andrew. Aeromagnetic interpretation of the geology of the Greenwood Lake and Sloatsburg quadrangles, New York and New Jersey 202-235
Jessop, A. M. See Uffen, R. J.
Jewell, F. Wilkes ice thickness measurements, Antarctica 1961 197-346
Jewell, T. R., and Ward, S. H. The influence of conductivity inhomogeneities upon audio-frequency magnetic fields 198-271
Jitsukawa, Akira, and Tajima, Hirokazu. Gravity surveys in the area of Northern Miyagi earthquake 196-243
Jobert, Georges. Measurable parameters during vibrations of the Earth 203-102

Abstract

Jobert, Georges. Models of distribution of densities in the terrestrial planets ---------- 192-240
 See also Blum, P. A.
Jobert, Nelly. Excitation of natural torsional oscillations of the Earth ---------- 197-122
Joesting, H. R., and Case, J.E. Regional geophysical studies in Salt Valley-Cisco area, Utah and Colorado ---------- 193-222
 See also Case, J. E.
Joglekar, D. V. Role of geophysics in river valley projects ---------- 194-323
John, Horst. An analysis of seismic velocities in western Emsland. 1. The foundations of the measurements. Horizontal and vertical subdivision of the area ---------- 194-307
—— An Analysis of seismic velocities in western Emsland. 2. Conclusions for seismic interpretation practice and consideration of the possible effect of structure on the velocity field ---------- 194-307
Johnson, G. R. See Roach, C. H.
Johnson, H. M. An engineer to coordinate geophysical logging operations ---------- 198-130
Johnson, P. V. See Balakrishna, S.
Johnson, R. H., Northrop, John, and Eppley, R. A. Sources of Pacific T-phases ---------- 202-67
Johnson, R. W., Jr., King, E. R., and Kawkins, D. R. Aeromagnetic map of the Chinook quadrangle, Blaine County, Montana ---------- 197-291
Johnson, R. W., Jr., King, E. R., and Long, C. L. Aeromagnetic map of the Yantic quadrangle, Blaine and Hill Counties, Montana ---------- 197-290
Johnson, R. W., Jr., King, E. R., and Page, E. E. Aeromagnetic map of part of the Cleveland quadrangle, Blaine County, Montana ---------- 197-293
Johnson, R. W., Jr., King, E. R., and Petrafeso, F. A. Aeromagnetic map of part of the Lloyd quadrangle, Blaine and Hill Counties, Montana ---------- 197-292
Johnson, R. W., Jr., and Watkins, J. S. Aeromagnetic map of Staunton and vicinity, Virginia ---------- 202-236
 See also Henderson, J. R., and Meuschke, J. L.
Johnston, R. B. See Black, G. A.
Jones, G. H. S. Experimental evidence of the coupling of Rayleigh and Love motion ---------- 198-101
Jones, G. H. S., Maureau, G. T., and Cyganik, S. A. Air-blast coupling to prograde and retrograde surface waves ---------- 203-136
Jones, L., Mathieu, P. L., and Strenger, H. Catalog of gravimetric and magnetic stations - Definitions and results of the measurements ---------- 200-213
Jones, Louis. See Evrard, Pierre.
Jones, M. P. Gravimetric exploration in the Edwards Trend area of south Texas ---------- 192-227, 199-172
Jones, W. P. See Spreiter, J. R.
Jordan, Carole. See Fielder, Gilbert.
Jordan, G. F. Submarine physiography of the U.S. continental margins ---------- 196-348
Jordan, J. N See Carder, D. S., and Rommey, Carl.
Jordan, P. Geophysical consequences of Dirac's hypothesis ---------- 195-141
Jouve, B., Lansiart, A., Létolle, René, and Morucci, J. C. Use of the natural radioactivity of potassium for its determination in rocks by gamma spectrometry ---------- 194-290
Joyner, W. B. Gravity in north-central New England ---------- 202-157
Judge, D. L., and Coleman, P. J., Jr. Observations of low-frequency hydromagnetic waves in the distant geomagnetic field: Explorer 6 ---------- 194-240

Abstract
Jung, Karl. Gravity methods in applied geophysics 203-196
Jurain, Georges. Contribution to the geochemical knowledge of the families of uranium-radium and of thorium in the southern Vosges. Application of some results to prospecting of deposits of uranium 200-306
See also Durand, G. L.
Justin Visentin, E. See Hieke Merlin, O.

K

Kääriäinen, Erkki. Bench mark list I of the second leveling of Finland 200-186
Kabo, R. I. A new way of splicing magnetic tape with getinak strips 199-335
Kaganov, M. A., and Rozenshtok, Yu. L. Problem of the accuracy of measurements of heat flows by heat meters of different form 196-248
Kagoshima Local Meteorological Observatory. The earthquake swarm in Yoshimatsu Town, Kagoshima Prefecture 193-65
Kailasam, L. N. Electrical and seismic anisotropy phenomena in stratified rocks and their practical consequences 196-178
Kaipov, R. L., and Leypunskaya, D. I. The use of Po-B neutron sources for activation logging in aluminosilicate rocks 199-299
Kakinuma, Seiichi. See Harada, Yoshimichi.
Kakioka Magnetic Observatory. Geomagnetic indices K and C for 1959 at Kakioka 195-248
—— Geomagnetic indices K and C for 1960 at Kakioka 194-250
—— Geomagnetic indices K and C for 1961 at Kakioka 203-269
—— Report of the Kakioka Magnetic Observatory, Geoëlectricity, 1957-58 195-44
—— Report of the Kakioka Magnetic Observatory, Geomagnetism, 1959 194-249
Kalab, B., and Broda, E. Unpurified carbon dioxide as a filling gas for counters 193-10
Kalashnikov, A. G. The history of the geomagnetic field (from paleomagnetic data) 198-263
Kalashnikov, V. N. Application of the theory of random functions in solution of certain problems of gravity prospecting 197-198
Kalenov, Ye. N., and Bogdanova, O. I. Significance of electrical sounding in the study of the basement relief of the Russian platform 201-137
Kalinin, J. D. Magnetic observations by artificial sputniks and rockets in connection with the World Magnetic Survey 192-252
Kalinin, N. A., Budnikov, N. P., Yenikeyev, P. N., Blinnikov, I. A., Gratsianova, O. P., and Khalturin, D. S. Ways of improving the procedure of geological exploratory operations for oil and gas 200-156
Kalinin, V. A., and Trubitsyn, V. P. Attenuation of surface waves in a layer on a halfspace 200-114
See also Yegorov, N. N., and Zharkov, V. N.
Kalinin, Yu. B. Secular geomagnetic variations, irregularities in the diurnal rotation of the Earth, and the Earth's radiation belts 201-252
Kalinin, Yu. D. Magnetic observations from artificial satellites and rockets in connection with the World Magnetic Survey 200-250
Kalinin, Yu. K. Discussion of the theory of propagation of electromagnetic waves in a piece-wise homogeneous flat waveguide 203-135
Kalinina, T. B., and Gol'tsman, F. M. Theory of optimum methods of determination of attitude of modeled bodies in magnetometry in the presence of interference 195-295
Kalinovskaya, G. P. See Mishin, V. M.
Kalinowska, Zofia. Magnetic storms registered in the years 1958 and 1959 at the Geophysical Observatory at Świder 197-250

Abstract

Kal'varskaya, V. P., and Lonskiy, A. V. Magnetic susceptibility logging apparatus -- 199-255
Kamada, Masaakira. See Iwasaki, Iwaji.
Kamata, Seikichi. Some geological and geophysical information obtained from seismic shot holes ------------------------------ 201-147
Kamenetskiy, F. M., and Kovalenko. V. F. Fast-acting switch for an electrical surveying station for work by the method of transient processes -- 199-96
— Irregular eddy currents in conducting blanket deposits--------- 193-131
— The transient field of an ungrounded loop in the presence of a conducting body covered by a layer of alluvium---------------- 201-124
See also Bezruk, I. A.
Kaminuma, Katsutada, and Aki, Keiiti. Crustal structure in Japan from the phase velocity of Rayleigh waves -------------------- 201-228
Kamiya, Hiroshi. See Noguchi, Kimio.
Kan, J. C. See Tseng, C. S.
Kanai, Kiyoshi. A new problem concerning surface waves--------- 195-87
— On the predominant period of earthquake motions ------------- 200-91
— On the spectrum of strong earthquake motions ---------------- 193-86
Kanai, Kiyoshi, and Morishita, Toshizo. Relation between earthquake damage and nature of the ground, II (Case of Nagaoka earthquake) --- 203-84
Kanai, Kiyoshi, Yoshizawa, Shizuyo, and Suzuki, Tomisaburo. An empirical formula for the spectrum of strong earthquake motions, II --- 203-85
Kanamori, Hiroo. A review of gravity measurements at sea------- 201-202
See also Takeuchi, Hitoshi, and Tomoda, Yoshibumi.
Kanasewich, E. R. Approximate age of tectonic activity using anomalous lead isotopes ----------------------------------- 197-14
— Gravity measurements on the Athabaska Glacier, Alberta, Canada -- 201-193
Kanda, Yutaro. Correlation between the velocities of elastic wave and the geological data obtained by the tunneling work in a quartz porphyry region -- 199-348
Kaneko, Tetsuichi. A depth determination method of linear increase velocity layer in seismic investigation ---------------------- 199-329
Kangas, T. On the geological sources of errors in refraction surveys -- 203-314
Kano, Kyoichi. See Usami, Tatsuo.
Kanno, Kiyoshi. See Akutsu, Juichi.
Kapit, B. F. See Moskvichev, Ye. I.
Kapitanov, Yu. T., and Serdyukova, A. S. On the calculation of the amount of air necessary for ventilation of uranium ore mining operations -- 193-312
Kaplan, B. L. See Yevdokimov, G. S.
Kaplan, Grégoire, and Leutwein, Friedrich. Contribution to the geochronologic study of the Vire granitic massif (Normandy) ---- 199-16
Kaplan, I. R., Degens, E. T., and Reuter, J. H. Organic compounds in stony meteorites------------------------------------ 203-45
Kaplan, I. R., Emery, K. O., and Rittenberg, S. C. The distribution and isotopic abundance of sulphur in recent marine sediments off southern California -------------------------------- 203-240
Kaplan, S. A. On the choice of optimal conditions of generation of elastic vibrations --- 198-322
Kaplin, P. A. See Budanov, V. I.
Kappelmeyer, O. See Fuchs, K.
Karaczun, Konstanty. Base measurements made with La Coura BMZ magnetometers in Poland -------------------------------- 201-307
— Detailed magnetic survey of the Z vertical component in the area of occurrence of lamprophyres in the Iwaniska region ------- 201-308
See also Kowalczuk, Jerzy.

Abstract

Karapetyan, B. K. Study of earthquakes and explosions with the aid of multipendulum seismometers ---------- 203-115

Karapetyan, B. K., and Sukhodol'skiy, V. V. An improvement in the construction of multipendulum seismometers for recording strong and weak earthquakes ---------- 203-113

See also Medvedev, S. V.

Karapetyan, N. K. Investigation of the spectral composition of seismic vibrations ---------- 203-106

Karasik, A. M. Effective zone of the UKV range-finder system for different accuracies of radiogeodetic determinations ---------- 199-256

Karasik, A. M., Kryukov, S. M., Levin, D. V., and Shchelovanov, V. G. Low altitude factors in an aerogamma-magnetic survey -- 199-252

Karasik, A. M., and Volk, V. E. Some features of the quantitative interpretation of high-accuracy aeromagnetic surveys ---------- 199-253

Karatayev, G. I. Calculation of the vertical gradient of magnetic and gravity anomalies with high accuracy ---------- 198-274

—— Problem of separating the regional background from observed gravity and magnetic anomaly fields ---------- 198-178

Karlemo, Bengt. Calculation of terrain corrections in gravity studies using the electronic computer ---------- 203-194

Karlen, Ingvar. See Olsson, I. U.

Karmaleyeva, R. M. Certain correlations of anomalous behavior of inclinations of the surface of the Earth with the time of occurrence of earthquakes ---------- 198-72

See also Latynina, L. A.

Karmanov, B. V., and Ardasenov, I. A. On a procedure for classifying conductivity anomalies caused by sulfide ore bodies and graphitzed carbonaceous slates ---------- 201-313

Kárnít, Vít, and Tobyáš, Vladimír. Experimental seismic station near Kašperské Hory ---------- 198-84

Karpushin, D. M. Enhancement of the effectiveness of surveying of magnetite deposits by using geophysical methods of investigation ---------- 200-287

Karus, Ye. V. The UNESCO seismological mission in the Mediterranean area and Near East ---------- 198-74

Kasahara, Keichi. Computer program for a fault-plane solution --- 196-122

—— Model experiments applied to seismology ---------- 201-337

—— Radiation mode of S waves from a deep-focus earthquake as derived from observations ---------- 198-70

—— Waveform analysis of S-pulse from deep-focus earthquakes. Pt. 1 ---------- 203-103

Kasanof, David. Project Loco ---------- 196-350

Kasatkin, D. P. On the scales and accuracy of gravimetric surveys ---------- 194-209

Kashkay, M. A., and Aliyev, V. I. Form, rhegmaglyptic relief, and features of the melted crust of the Yardymlin iron meteorite- 198-29

Kašpar, Milan. Determination of the position of ventilation boreholes by a geophysical method ---------- 192-137

Katada, Masato. See Shibata, Ken.

Katili, J. A. On the age of the granitic rocks in relation to the structural features of Sumatra ---------- 202-24

Katin-Yartsev, M. L. See Astrakhantsev, G. V.

Kato, Yoshio. Geomagnetic micropulsations ---------- 192-274

Kato, Yoshio. Matsuo, Tadayuki, and Takagi, Akio. Aeromagnetic surveys over the Oshima Island ---------- 195-305

Kats, A. Z. Calculation of the dynamic pressures on the ground produced by seismic vibrations of a rigid structure ---------- 197-99

—— Determination of the dynamic pressure on the ground during seismic vibrations of a rigid structure ---------- 203-89

—— Instrumental study of dynamic deformations of grounds ---------- 193-87

Abstract

Kats, A. Z., and Rustanovich, D. N. Seismicity of the Sochi-Krasnaya Polyana region ---------- 192-64
See also Medvedev, S. V.
Kats, S. A. Dispersion of seismic waves in porous mediums ------ 198-93
—— Method of frequency analysis and synthesis on the basis of the Fourier integral ---------- 200-321
—— Propagation of vibrations in a monodimensional discrete medium ---------- 192-112
See also Glogovskiy, V. M.
Katskov, A. I. See Artamonov, L. V.
Katsui, Yoshio; Oba, Yoshio; Iwanaga, Masaki; Soya Tatsunori; Takahashi, Toshimasa; Hirai, Yoshiro; Nishimura, Takeshi; and Hiroshi, Ito. 1962 eruption of Tokachi-dake, Hokkaido --------- 202-356
See also Ishikawa, Toshio.
Katsumata, M. List of major earthquakes in and near Japan, during the period from 1951 to 1960 ---------- 192-100
Katsura, Takashi. See Iwasaki, Iwaji.
Katz, Samuel. See Ahrens, T. J., and Woeber, A. F.
Kaufman, A. A. On calculation of variable magnetic fields caused by turbulent currents in mediums of finite conductivity---------- 198-108
Kaufman, A. A., Shapiro, R. P., and Khitarova, L. V. Fundamental theory of induction logging ---------- 194-155
Kaufman, A. B. Natural frequency and damping---------- 195-68
Kaufman, Aaron. See Giffin, Charles.
Kaufman, G. F. Petroleum developments in Far East during 1961 - 192-155
Kaufman, Larry. See Ringwood, A. E.
Kaufman, S. See Van Melle, F. A.
Kaula, W. M. Analysis of satellite observations for longitudinal variations of the gravitational field ---------- 193-184
—— Elastic models of the mantle corresponding to variations in the external gravity field ---------- 203-189
—— Geodetic studies using satellites ---------- 196-210
—— Tesseral harmonics of the gravitational field and geodetic datum shifts derived from camera observations of satellites---------- 195-194
—— Tidal dissipation in the Moon ---------- 203-55
Kawachi, Yosuke. See Miller, J. A.
Kawai, H. I. See Suzuki, Ziro.
Kawai, Naoto. See Takada, T.
Kawajiri, Nobuhiro. See Ishizawa, Kaoru.
Kawamura, M., Kurusu, K., Oshima, H., and Yanagihara, Kazuo. On the geomagnetic pulsation pc. (I) World-wide distribution of the horizontal disturbing vector ---------- 195-252
Kawano, T. See Yagi, Kenzo.
Kawata, Kiyoo. See Shibata, Ken.
Kayama, Izao; Murozumi, Masayo; Okura, Takeshi; Uzumasa, Yasumitsu; and Ossaka, Joyo. Volcanic sublimates and volcanic activities ---------- 203-346
Kayano, Ichiro. See Hagiwara, Takahiro.
Kazachevskiy, I. V. See Cherdyntsev, V. V.
Kazakova, Z. A. Methodology of distinguishing fissured rock reservoirs by well logging methods ---------- 198-116
Kazanli, D. N., and Popov, A. A. Characteristics of deep waves registered in central Kazakhstan ---------- 194-341
Kazimierczyk, Mirosław. Greater progress in resistivity measurements by improving operations ---------- 201-138
Kazinskiy, V. A. Solution of geophysical and geodetic problems by the method of successive approximations ---------- 202-153
Kebuladze, V. V. On certain regularities of disturbed Earth currents ---------- 195-39
Keen, M. J. Magnetic anomalies over the Mid-Atlantic Ridge------ 198-279

Abstract

Keevil, N. B., Jr., and Ward, S. H. Electrolyte activity: its effect on induced polarization ---------- 195-104

Keil, Klaus. See König, H., and Frederiksson, Kurt.

Keith, M. L., and Anderson, G. M. Radiocarbon dating; ficitious results with mollusk shells ---------- 203-5

See also Weber, J. N.

Keller, Fred, Jr., and Henderson, J. R., Jr. Aeromagnetic map of part of the tri-state mining district, Kansas, Missouri, and Oklahoma ---------- 202-240

Keller, Fred, Jr., Henderson, J. R., Jr., and others. Aeromagnetic map of the Magnet Cove area, Hot Spring County, Arkansas- 197-287

Keller, J. B. Geometrical methods and asymptotic expansions in wave propagation ---------- 197-108

Kempton, N. H. See Miller, J. A.

Kendall, P. C. C-F hollows for solar streams partially incident on the Earth ---------- 199-230

—— Geomagnetic control of diffusion in the F2-region of the ionosphere--I. The form of the diffusion operator ---------- 193-262

Keppler, E., Ehmert, A., Pfotzer, G., and Ortner, J. Sudden increase of radiation intensity coinciding with a geomagnetic storm sudden commencement ---------- 194-262

Kern, J. W. See Lamar, D. L.

Kerr, P. F. See Bassett, W. A.

Keylis-Borok, V. I. Investigations of dislocations at earthquake focuses ---------- 196-123

Keylis-Borok, V. I., and Malinovskaya, L. N. On the problem of detecting explosions by means of body wave arrivals ---------- 194-120

Keylis-Borok, V. I., and Yanovskaya, T. B. Relationship of the spectrum of surface waves to the depth of the source within the crust ---------- 197-100

See also Pyatetskiy-Shapiro, I. I.

Kezhutin, N. G. See Rabinovich, B. I.

Khabibullina, R. I. See Smelov, A. A.

Khachiyan, E. Ye. Use of computers for the determination of seismic stress from accelerograms of strong earthquakes ---------- 203-91

Khain, V. Ye. See Dumitrashko, N. V.

Khalevin, N. I. Tectonic breaks in the basement of Trans-Uralia according to geophysical data ---------- 201-157

—— The velocity of elastic waves in rock samples from the Urals and in their natural position ---------- 201-351

Khalevin, N. I., and Bun'kov, A. M. Microseismic investigations with the SSP-14 seismic station in the Lower Tagil synclinorium of the Urals ---------- 201-352

Khalevin, N. I., and Malakhov, A. A. Regional seismic investigations in the Urals in connection with extra deep drilling ---------- 199-195

Khalevin, N. I., and Yunusov, F. F. Use of elastic waves of industrial explosions for sounding the Earth's crust in the Urals--- 199-194

Khalfin, L. A. On the optimal filter for counting radioactive radiation ---------- 194-302

See also Khaykovich, I. M.

Khalturin, D. S. See Kalinin, N. A.

Khambata, S. J. Presence of thorium in the rock samples of the Deccan traps ---------- 193-15

Kharchenko, F. M. See Kravets', V. V.

Kharchenko, S. P. See Tyapkin, K. F.

Kharganov, G. Kh. See Rogachev, B. V.

Kharin, D. A. See Bagdasarova, A. M., Kirnos, D. P., and Savarenskiy, Ye. F.

Kharitonov, M. F. See Yakubov, A. A.

Kharlamov, I. P. See Semenov, A. S.

Kharus, R. L. See Sen'ko-Bulatnyy, I. N.

Abstract

Khat'yanov, F.I. Fundamental features of the structure of the southern part of the Cis-Ural marginal depression according to geophysical data and drilling results ---------------------------- 202-106

Khaykovich, I. M. The distribution of radon in an ore layer cut by a cylindrical borehole -- 194-296

Khaykovich, I. M., and Khalfin, L. A. The change in gamma-ray intensity of a radioactive half space due to its sealing by a surface impervious to gas --------------------------------------- 194-300

Khayrullin, R. V. See Zhuvagin, I. G.

Khazanov, B. I. Gamma radiation of the elements of the uranium and thorium groups in the area of low energies ---------------- 202-263

Kheyfets, M. Ye. Results of testing of a new pendulum apparatus of the Gravimetric Laboratory of the TsNIIGAIK ----------------- 196-236

—— The new pendulum apparatus of the gravimetric laboratory of the Central Scientific Research Institute for Geodesy, Aerial Surveys and Cartography -- 196-235

Khilenskiy, L. A. See Sollogub, V. B.

Khitarov, N. I. About water and basaltic magma ----------------- 202-321

Khitarov, N. I., Ryzhenko, B. N., and Lebedev, Ye. B. Determination of the electrical conductivity of sodium carbonate and bicarbonate solutions under hydrothermal conditions------------ 198-134

Khitarova, L. V. See Kaufman, A. A.

Khitev, P. P. See Ochkur, A. P.

Khmelevskoy, V. K. Dipole sounding along the crest of a mountain range--- 200-129

—— The potentialities of the radar method in geological prospecting- 194-136

Kholin, V. N. See Garkalenko, I. O.

Kholmyanskiy, M. A. See Leman, Ye. P.

Khomenyuk, Yu. V. A barretter-transformer direction stabilizer-- 199-130

Khorosheva, O. V. The space and time-distribution of auroras and their relationship with high-latitude geomagnetic disturbances --- 201-258

Khorosheva, V. V. Investigation of a waveguide in a rigid two-dimensional model with sharp boundaries ---------------------- 194-87

See also Magnitskiy, V. A.

Khotinskiy, N. A. See Neyshtadt, M. I.

Khovanova, R. I. Earthquakes of the Altay-Sayan zone------------ 192-74

Khromskiy, A. V. See Ostrovskiy, A. Ye.

Khuan, Z-T., and Baydyuk, B. V. Effect of temperature on deformation of argillaceous rocks in the walls of boreholes ---------- 195-341

Khudzinskiy, L. L. An attempt at the use of spectral analysis in seismic surveying --- 194-328

—— Determination of some spectral features of layered mediums--- 198-313

See also Yepinat'yeva, A. M.

Khutsaidze, A. L. On the problem of experimental study of the diffusion of radiogenic argon in feldspars and micas -------------- 195-8

Kichin, N. N. See Galkin, I. N.

Kigoshi, Kunihiko, and Endo, Kunikiko. Gakushuin natural radiocarbon measurements II ------------------------------------- 203-29

Kikuchi, Shigetomo. On the short period volcanic micro-tremors at Mt. Aso --- 196-357

Kim, C. S. Report of magnetic prospecting on the area around Sosock iron mine district ------------------------------------ 200-299

Kim, K. S. See Baag, C. G.

Kimura, Shigemasa. An example of determination for three layer structures by Kurihara's, Kaneko's and successive approximate refraction analysis -- 198-316

—— On the multiple reflection on Ariake Sea -------------------- 192-340

See also Kuroda, Hidetaka.

Kind, N. V. Some new data on the absolute chronology of the Upper Pleistocene and the age of the Upper Paleolithic sites of Europe - 202-21

King, A. J. See Carter, G. S.

Abstract

King, C. A. M., and Wheeler, P. T. The raised beaches of the north coast of Sutherland, Scotland ---- 203-179
King, E. A. Field investigation of Georgia tektites and description of new specimens ---- 199-40
King, E. R. See Johnson, R. W., Jr.
King, J. E. See Norden, J. A. E.
King, J. W., and Graham, C. The relationship between f_oF2 and magnetic phenomena ---- 193-275
King, L. C. Cymatogeny ---- 200-188
King, M. S., and Fatt, Irving. Ultrasonic shear-wave velocities in rocks subjected to simulated overburden pressure ---- 195-91
See also Somerton, W. H.
King, P. B. The subsurface Ouachita structural belt east of the Ouachita Mountains ---- 192-187
King, R. E. Petroleum exploration and production in Europe in 1961 ---- 192-148
King, R. F. Comments on paper by R. L. DuBois, "Remanent, induced, and total magnetism" ---- 202-223
See also Griffiths, D. H.
Kingery, W. D. Elastic and time-dependent deformation of ice sheets during aircraft operations ---- 192-345
Kingery, W. D., and French, D. N. Comparison of different methods for measuring sea ice strength ---- 192-349
—— Stress-rupture behavior of sea ice ---- 192-347, 202-302
See also Hobbs, H. A.
King-Hele, D. G. The Earth's gravitational potential, deduced from the orbits of artificial satellites ---- 193-186
Kinnear, J. K. See Duffus, H. J.
Kinningham, Russell. See Chandler, J. B.
Kinzikov, A. R. See Begishev, F. A.
Kirby, J. R. See Meuschke, J. L., and Popenoe, Peter.
Kirichek, M. A., Sokolova, V. V., and Cheredeyev, I. V. On the results of the use of the electrical profiling method in the northeast part of Sakhalin ---- 200-130
Kirichenko, N. M. See Belomar, O. D.
Kirnos, D. P. New instruments for the registration and analysis of strong earthquake records ---- 203-112
Kirnos, D. P., Kharin, D. A., and Shebalin, N. V. History of development of instrumental seismic observations in the U. S. S. R ---- 192-90
Kirov, K. T. Features of earthquakes in the Kaliakra region ---- 196-113
Kirsten, T., Krankowsky, D., and Zähringer, J. Rare gas and potassium determinations on a rather large number of stone meteorites ---- 198-27
Kiryushina, M. G., Pol'kin, Ya. I., Sokolov, V. I., and Strelkov, S. A. Features of the expression of recent tectonics in the Soviet Arctic ---- 195-165
Kirzner, I. B. Application of the method of electromechanical analogy to the theory of the galvanometer, with and without taking into account the interaction of the electrical and mechanical systems ---- 195-138
Kiselev, Yu. G. Deep geologic structure of the Ust-Yenisei basin and its framework in the light of recent geophysical data ---- 199-119
—— Seismic investigations with the "Yermak" in high latitudes ---- 199-346
—— Study of the deep structure of the Earth's crust of the northwest margin of the Siberian platform by means of industrial explosions of the Norilsk Combine ---- 199-347
Kishinouye, Fuyuhiko. Oscillations of water in a reservoir, observed in the case of the Kita Mino earthquake on August 19, 1961 ---- 193-67

Abstract

Kiss, Zoltan. See Bisztricsány, Ede.

Kisslinger, Carl. Discussion of "The effect of shotpoint medium on seismic coupling," by W. M. Adams, and L. M. Swift --------- 200-123

Kistler, R. W. See Creasey, S. C.

Kitsunezaki, Choro. Study on high frequency seismic prospecting (3). The body wave converted from a tube wave --------------- 192-330

Klein, O. See Alfvén, Hannes.

Kleymenova, N. G. See Vladimirov, N. P.

Kliburszky, B. See Földvári-Vogl, M.

Klubov, V. A. The use of geophysical data for tectonic regionalization (exemplified by the southeastern Ural-Volga area) --------- 196-196

Klubov, V. A., and Yarosh, A. Ya. Method of constructing relief maps of the crystalline basement according to geological-geophysical data -- 197-161

See also Gorelov, S. K.

Kluitenberg, G. A. Thermodynamical theory of elasticity and plasticity --- 193-345

Klushin, I. G. Investigation of the distribution of sources of gravity and magnetic anomalies according to depth ------------------ 197-194

See also Andreyev, B. A.

Kluss, Tadeusz. Approximate determination, by means of an astro-geodetic method, of the position of the geoid with respect to the Krassovsky ellipsoid on the expanse of Poland ---------------- 192-179

Knapp, D. G., and Gettemy, J. W. A new longitude effect in the geomagnetic solar daily variation --------------------------- 199-222

See also Nelson, J. H.

Kneissl, Max. Brief report on the new calculation for compensation for the Unified European Levelling Network--------------- 192-183

—— Munich, a center of geodesy in Germany ------------------- 194-184

—— Proposals for the formation and compensation of a uniform European gravity network ------------------------------------ 192-223

—— Report on the calculation of geopotential heights by means of normal gravity for the West German part of the Unified European Levelling Network -- 192-182

—— Report on the work on earth tide research at the First Division of the German Geodetic Research Institute------------------- 193-103

—— The calculation of the geopotential heights for the German portion of the Unified European Levelling Network --------------- 194-183

Knopoff, Leon. Higher order Born approximations for the inversion of Love wave dispersion ------------------------------------ 196-143

—— The theory of finite strain and compressibility of solids ------- 200-109

Knorre, K. G. See Vinogradov, A. P.

Knox, Reed, Jr. The microstructure of several stony meteorites -- 199-26

Knyazev, V. S., Krylov, A. Ya., Silin, Yu. I., and Shnip, O. A. New data on the age of the basement rocks of western central Asia -- 197-24

Kobayashi, Kazuo. Magnetization-blocking process by volume development of ferromagnetic fine particles --- ---------------- 197-260

See also Nagata, Takesi.

Kobayashi, Naota. See Takeuchi, Hitoshi.

Kobliška, M. A. Microseismic prediction of rock failure in underground openings -- 197-348

Kobold, F., and Hunziker, E. Communication on the curvature of the vertical -- 192-202

Kobranova, V. N. The physical properties of rocks (petrophysics) - 203-164

Koch, Lauge. See Kulp, J. L.

Kochetkov, V. M. On the seismic regionalization of the territory of Yakutia------- ------------ -------------------------- 194-75

—— Results of interpretation of instrumental observations of the earthquakes of January 5 and September 14, 1958 ------------- 201-79

See also Rezanov, I. A.

Abstract

Kochiay, S. See Oblogina, T. U.

Kochkurov, M. F. A device for laying cable in carrying out geophysical operations---------- 199-97

Kockarts, G., and Nicolet, Marcel. The aeronometric problem of neutral helium and hydrogen ---------- 195-230

Koefoed, O. Reflection and transmission coefficients for plane longitudinal incident waves---------- 196-150

Koenigswald, G. H. R. von. Age of basalt underlying Bed I, Olduvai ---------- 201-11

—— Tektite studies V: Strain in tektite glass---------- 203-52

Kogan, R. M. See Balyasnyy, N. D.

Kogan, S. D. Travel times of body waves from surface focus------ 193-122

Kogan, S. D., Pasechnik, I. P., and Sultanov, D. D. Seismic observations in the Antarctic ---------- 198-66

Kogan, S. Ya. Seismic energy induced by a source on a surface --- 203-134

Kogarko, S. M. See Yevdokimov, G. S.

Kohman, T. P. See Goel, P. S.

Kőhsling, Juliusz. Graphic method of interpretation of electrical resistivity investigations in the search for water ---------- 193-128

Kokesh, F. P., and Blizard, R. B. Geometrical factors in sonic logging ---------- 202-274

Kokubun, Susumu. See Nagata, Takesi.

Kolesov, B. M., Lyubavin, Yu. P., and Ovchinnikov, A. K. Spectrums of γ-radiation of radioactive ores in natural occurrence obtained by means of proportional counters---------- 202-262

Kolesova, V. I. See Pudovkin, I. M.

Kolmakov, M. V. A method of recording the horizontal magnetic components of the short-period variations of the electromagnetic field of the Earth ---------- 198-43

—— Experience in the use of magnetic recording of variations in the alternating magnetic field of the Earth ---------- 195-243

—— In demonstration of a type of equivalence for magnetotelluric sounding curves ---------- 198-44

—— On the limiting sensitivity of induction magnetic pickups for magnetotelluric sounding ---------- 198-47

Kolmakov, M. V., and Zelentsov, I. A. Construction of induction pickups for magnetotelluric investigations ---------- 196-102

Kolmogorova, P. P. Numerical solution of non-singular integrals encountered in the interpretation of magnetic and gravitational anomalies, on electronic computers ---------- 193-204

Kologrivov, R. See Kulp, J. L.

Kolomeyets, Ye. V. See Dorman, L. I.

Kolomiytseva, G. I. See Finger, D. L.

Kolsky, Herbert. Stress waves in anelastic solids---------- 197-113

Kol'tsova, T. V. See Gerling, E. K.

Komarov, A. G. Comments on the paper of N. P. Mikhaylova "On the natural magnetization of gabbro-pyroxenites of the Oktyabr'skiy alkaline massif" ---------- 202-224

Komarov, A. G., Moskaleva, S. V., Belyayev, V. M., and Il'ina, V. I. On the interpretation of the magnetic fields over ultrabasic complexes. Serpentinization and magnetic properties ---------- 196-287

Komarov, S. G., Kozina, Z. K., Guzanova, I. G., and Nichiporuk, V. A. Determination of porosity according to the indications of small gradient-sondes ---------- 201-144

Komarov, S. G., and Per'kov, N. A. Status and ways of developing geophysical investigations in wells drilled for oil and gas ---- 197-153

Komarov, V. A. Method of induced polarization and the prospects for its use in exploration for disseminated ores---------- 199-92

Komarov, V. L. Evaluation of the effectiveness of geophysical methods of determination of reservoir properties of rocks ------ 195-116

Abstract

Komlev, L. V., L'vov, B. K., Danilevich, S. I., Kryukova, N. F., and Mikhalevskaya, A. D. Absolute age of the granitoids of the Kochkar complex (S. Urals) ---------- 195-15
Kondo, G. On the air-earth current ---------- 195-45
Kondorskaya, N. V., and Landyreva, N. S. Characteristics of the seismicity of the Kamchatka region according to data of observations of a net of stationary seismic stations---------- 196-115
Kondorskaya, N. V., and Tarakanov, R. Z. Kurile-Kamchatka earthquakes ---------- 192-77
See also Belotelov, V. L., and Vvedenskaya, N. A.
Kondratenko, A. F. Use of pulsating currents for combined electrical survey investigations by the methods of induced polarization, transient field, and resistivity ---------- 198-105
König, H., Keil, K., and Hintenberger, H. Investigations on stone meteorites with extremely high rare gas content. II. The chondrite Tabor ---------- 193-28
König, H., Keil, K., Hintenberger, H., Wlotzka, F., and Begemann, Friedrich. Investigations of stone meteorites with extremely high rare gas content. I. The chondrite Pantar ---------- 193-27
König, H., and Wlotzka, F. Investigations on stone meteorites with extremely high rare gas content, pt. 3. On the seat of the light primordial rare gases in the chondrite Pantar ---------- 192-18
See also Hintenberger, H.
Kon'kov, A. T. See Butovskaya, Ye. M.
Kononenko, I. I. The field of a point source of current in a two-layered medium ---------- 201-127
Kononenko, I. I., and Rodionov, P. F. The field of a point source of current situated at depth in a two-layered medium with a vertical contact ---------- 201-130
—— The field of a point source situated at depth in the presence of a vertical layer ---------- 201-131
See also Gurevich, Yu. M.
Konovalov, M. M. Three-dimensional interpretation of borehole seismic survey data ---------- 201-332
Konstantinova, A. G., and Mysina, L. G. Relative variations in energy of seismoacoustic processes at the time of sudden bursts of coal and gas ---------- 201-355
Kopal, Zdeněk. Convection in planetary interiors ---------- 200-233
—— Figures of equilibrium of celestial bodies ---------- 197-172
—— Gravitational heating of the Moon---------- 201-52
Kopal, Zdeněk, and Fielder, Gilbert. Determination of the heights of mountains on the Moon ---------- 196-74
Kopal, Zdeněk, and Lyttleton, R. A. On the elliptic case of the restricted problem of three bodies and the remote history of the Earth-Moon system ---------- 201-46
See also James, Richard.
Kopelev, Yu. S. See Berdichevskiy, M. N.
Kopf, Manfred. Density determinations on rocks of the eastern Erzgebirge ---------- 203-209
—— Density values of rocks of the Erzgebirge and adjacent regions - 192-235
Kopia, Henryk. Detection and contouring of oil and gas deposits by means of the relative effectiveness of gamma radiation ---------- 201-312
Kopia, Henryk, Plewa, Stanisław, and Rudowicz, Jan. Application of surface radiometry in the Polish oil industry ---------- 198-294
Korchagina, O. A. See Monakhov, F. I.
Korf, M. G. See Medvedev, S. V.
Koridalin, Ye. A., Masarskiy, S. I., Nersesov, I. L., and Kharin, D. A. Attempt at instrumental study of local earthquakes---------- 192-59
See also Bagdasarova, A. M.

Abstract

Kornev, V. A., Lutsuk, Ye. M., and Sungurov, A. M. Main tectonic features of the Caspian Sea according to marine geophysical investigations ---------- 199-117
See also Laskina, V. V.
Korniyets, D. V. See Lebedev, T. S.
Korobkova, G. I. See Zubareva, E. P.
Korobov, S. S. On some problems of procedure of exploratory operations on potassium salts of salt domes ---------- 200-333
Koroleva, K. P., and Skugarevskaya, O. A. Later stage of establishing a magnetic field in layered mediums ---------- 199-88
Korotkin, A. B. See Pudovkin, M. I.
Korotkov, S. T. Procedure of prospecting for oil and gas fields in the Krasnodar Territory ---------- 200-158
Korovina, T. L. See Donabedov, A. T.
Korsun', A. A. See Fedorov, Ye. P.
Kortsenshteyn, V. N. New data on the geothermy of the Bukharo-Khiva oil and gas province ---------- 196-252
Korunova, A. F. The field of a point source of current in a three-layered medium ---------- 201-128
—— The field of a point source of current located at depth in the presence of an ideally conducting sphere ---------- 201-129
Korzhev, A. A., and Vladimirova, V. A. Estimation of the possibility of using radioactive isotopes for the study of permeable formations ---------- 200-315
Koshlyak, V. A. Relation of the heat field of the West Siberian Lowland to the relief of the pre-Jurassic basement ---------- 200-229
Kosminskaya, I. P., and Krakshina, R. M. On supercritical reflections from the Mohorovičić discontinuity ---------- 193-123
Kosminskaya, I. P., Zverev, S. M., Veytsman, P. S., Tulina, Yu. V., and Krakshina, R. M. Maine features of the structure of the crust of the Sea of Okhotsk and Kurile-Kamchatka zone of the Pacific Ocean according to data of deep seismic sounding ---------- 199-196
See also Aver'yanov, A. G., Gal'perin, Ye. I., and Veytsman, P. S.
Kosygin, Yu. A. See Borisov, A. A.
Kosztolanyi, Charles. Age measurements on some recent minerals by the lead isotope method ---------- 203-3
Kotlovskaya, F. I. See Semenenko, N. P.
Kotyuk, A. F. See Mizyuk, L. Ya.
Kouloumdjian, J., and La Foucriére, J. Compensation of the terrestrial magnetic field in an iron-free spectrometer by double focusing in a one-meter radius ---------- 203-265
Kovach, R. L., and Anderson, D. L. Long-period Love waves in a heterogeneous, spherical earth ---------- 194-103
Kovach, R. L., and Monges C., Julio. Measurements of gravity in the northern part of Baja California, Mexico ---------- 200-212
See also Carr, R. E., and Sutton, G. H.
Koval', L. A. Calculation of the correction for the topographic effect in gravity surveying on an electronic computer (example) ---------- 200-205
Kovalenko, G. V. See Vlasov, A. Ya.
Kovalenko, V. F. See Kamenetskiy, F. M.
Kovalev, O. I. See Vasil'yev, Yu. I.
Kovalevich, V. B. Attempt at the use of geophysical methods in prospecting and exploring iron ore deposits of the Angara-Ilim area (summary) ---------- 200-154
Kovalevskiy, A. F. See Plekhanov, G. F.
Kovalevskiy, I. V., Mikerina, N. V., Novysh, V. V., and Gorodnicheva, O. P. Distribution of the earth currents from an electrified railroad in the southern Urals ---------- 201-66
Kovalevskiy, M. I. Relationship of relief and tectonic structure of the territory of the Latvian S. S. R ---------- 195-158

Abstract

Kovtun, A. A. Construction of magnetotelluric sounding curves according to records of short-period variations of the natural electromagnetic field of the Earth --- 197-64

Kovylin, V. M. Third Mediterranean cruise of the E/V "Academician S. Vavilov" --- 193-353

Kowalczuk, Jerzy, and Karaczun, Konstanty. Elements of the Earth's magnetism in the Hornsund Fjord on Spitsbergen in the year 1957 and their secular variation --- 195-247

—— Results of observations of elements of Earth's magnetism in the Hornsund Fjord on Spitsbergen in 1957 --- 192-271

Koyava, V. K. See Dorman, L. I.

Kozachok, A. On the effect of resonance capture on the distribution of neutrons in rocks with low hydrogen content --- 192-326

Kozera, Alfons. Modeling of geologic structures by calculative-mechanical means in gravimetric surveys --- 201-201

Kozera, Alfons, and Mrozek, Kazimierz. Opinion on the geology in the zone of the steep gravity gradient northwest of Radomsko --- 201-211

Kozhevnikov, D. A. An investigation of the space-energy distribution of neutrons in a medium with high hydrogen content --- 197-324

—— Computing the moderation length of neutrons in media of high hydrogen content --- 197-313

—— The space-energy distribution of neutrons in media of high hydrogen content --- 197-319

See also Guberman, Sh. A.

Kozina, Z. I. See Petrosyan, L. G.

Kozina, Z. K. See Komarov, S. G.

Kozhukhov, V. A. On the necessity of improving the quality of exploratory and investigatory operations in order correctly to appraise reserves of oil and gas --- 200-144

Kozlov, Ye. A. Velocity of longitudinal waves in terrigeneous sediments --- 194-117

Kozłowski, M. F. Guiding-center approximation in the diamagnetic ring current --- 202-208

—— Short-period variations of the Earth's magnetic field in Poland - 192-277

Kozulin, Yu. N. Method of reflections for calculating the electromagnetic field above horizontally layered structures --- 201-122

Koz'yakova, K. Ya. Results of calibration of GAE-3 gravimeters -- 198-182

Kozyrev, N. A. On the existence of volcanic activity on the Moon -- 202-49

Kozyrev, Nikolai. Volcanic phenomena on the Moon --- 201-56

Kozyrev, V. S. See Gladkiy, K. V.

Kozyrin, A. K. Use of borehole geophysical investigations in testing ore deposits --- 200-142

Krakshina, R. M. See Aver'yanov, A. G., Gal'perin, Ye. I., and Kosminskaya, I. P.

Kramer, M. V. See Dobrokhotov, Yu. S., and Pariyskiy, N. N.

Krankowsky, D. See Kirsten, T.

Krasnobayev, A. A. Lead-alpha age of some minerals from the Urals --- 195-14

Krasnobayeva, A. G. The field of a point source in the presence of a conducting body according to electrical modeling data --- 201-132

Krasnyy, L. I. See Itsikson, M. I.

Kratts, K. O. Geology of the karelids of Karelia --- 203-17

Krauklis, P. V. Effect of a thin layer on the field of reflected waves --- 200-111

See also Molotkov, L. A.

Kraut, E. A. See Harrison, J. C.

Kravchuk, M. S. Determination of the residual oil saturation and coefficient of oil recovery of depleted pools of the Shirokaya Balka type according to geophysical data --- 194-163

Kravets', V. V., and Kharchenko, F. M. An idealized model of distribution of displacement amplitudes in a vertically layered medium --- 193-111

Abstract

Krayev, A. G. Use of a land boom in seismic surveying ---------- 199-327
Krejci-Graf, Karl. Organic substances in meteorites ---------- 192-17
Kremser, Gerhard. Results of geomagnetic deep sounding in the neighborhood of Göttingen ---------- 192-267
Krestnikov, V. N., and Nersesov, I. L. Tectonics of the Pamir and Tien Shan and its relation to the relief of the Mohorovičić surface ---------- 196-264
See also Gzovskiy, M. V.
Krijger, B. G. K. See Alberda, J. E.
Krinari, A. I., and Salikov, A. G. Data for the study of the density of rocks of the Paleozoic of Tatary and the nature of the gravity anomalies ---------- 195-199
—— Magnetic susceptibility of the rock of the Paleozoic of Tatary and new data on the nature of the magnetic anomalies ---------- 194-278
Krishna Murthy, P. V., and Prahallada Rao, B. S. An all-metal spectrometer for the isotopic analysis of hydrogen at natural concentration levels ---------- 196-269
Krishnan, M. S. Deccan Trap volcanism ---------- 203-230
—— Island arcs, with special reference to S. E. Asia ---------- 198-152
—— The surface and interior of the Earth ---------- 196-255
Krishnan, R. S. See Venkatasubramanian, V. S.
Krivoy, H. L. See Eaton, J. P.
Krogdahl, W. S. The Astronomical Universe ---------- 197-35
Królikowski, Czesław. See Jankowski, Jerzy.
Kropotkin, P. N. Fundamental features of the neotectonics of Kamchatka, the Koryak Ridge, the Kurile Islands and adjacent parts of the Pacific Ocean and Okhotsk Sea ---------- 195-177
—— Phenomena of contraction and expansion in the Earth's crust and possibilities of studying them ---------- 196-218
Krotevich, N. F., and Morozova, G. M. The method of determination of ρ_N by data of magnetotelluric profiling ---------- 198-49
Krotikov, V. D., and Shchuko, O. B. On the problem of the thermal behavior of the Moon's surface layer during a lunation ---------- 201-51
Krotikov, V. D., and Troitskiy, V. S. On the heat conductivity of lunar rocks according to the data of precise measurements of lunar radio emission ---------- 201-50
—— The radiation properties of the Moon at centimeter wavelengths- 196-62
Krotkov, R. See Dicke, R. H.
Krs, Miroslav. Reverse and normal remanent magnetization in hydrothermal veins ---------- 203-274
Kruglyakova, G. I. See Borisov, A. A.
Krummenacher, Daniel. See Buchs, Armand.
Krutikhovskaya, Z. A., and Savenko, B. Ya. Attempt at tracing fracture zones by geophysical methods ---------- 199-116
Krutivskaya, Z. A., and Zavoyskiy, V. N. An experiment to studying the magnetization of the ferruginous quartzites of the Kremenchug magnetic anomaly ---------- 193-293
Krylov, A. Ya., Silin, Yu. I., Atrashenok, L. Ya., and Lovtsyus, A. V. Absolute age of rocks in the Mirnyy region, Antarctica--- 195-16
Krylov, A. Ya., Voronov, P. S., and Silin, Yu. I. Absolute age of the crystalline basement of East Antarctica ---------- 196-30
See also Knyazev, V. S., and Ravich, M. G.
Krylov, M. K. Features of the selection of equivalent circuits in determining the specific resistivity, dielectric constant, and magnetic permeability of rocks ---------- 202-103
Krylov, S. V. Construction of reflecting boundaries by the method of "average time" ---------- 199-316
Krylov, S. V., Potap'yev, S. V., Terpelyak, O. A., and Treskova, Yu. A. Investigation of the surface of the folded basement in the region of the middle course of the Ob River by the method of seismic sounding ---------- 200-341

Abstract

Kryukov, S. M., and Levin, D. V. Calculation of variations of the magnetic field according to three stations 199-251
See also Karasik, A. M.

Kryukova, N. F. See Komlev, L. V.

Krzemiński, Wojciech, and Uhrynowski, Andrzej. Comparison measurements of the value of the Z and H variometer bases carried out between the Świder and Krasna Pacha observatories 192-268

Kubotera, Akira, and Yoshikawa, Keizo. Prediction of volcanic eruption Aso and Sakurazima and some related geophysical problems 203-351

Kudrevskiy, A. I. The mass production PM-1 magnetometer 198-229

Kudymov, B. Ya. See Polshkov, M. K.

Kukharenko, N. K., and Basin, Ya. N. Modernization of radioactivity logging apparatus 199-291

Kukharev, V. N. See Duganov, G. V.

Kukhtikova, T. I., and Yeferina, G. P. Surface waves from near earthquakes 201-82

Kukuruza, V. D. Example of the determination of the strike of zones of tectonic breaks according to VEZ data 200-131

Kuleshova, V. P. The connection between Class 3 and 3+ chromospheric flares and geomagnetic disturbances 201-268

Kulikov, P. K. On the conditions of formation of structures connecting fold zones of different ages 203-182

Kulikov, V. I. See Ali-Zade, A. A.

Kulinkovich, A. Ye. The EKSM electrointegrator 201-142

Kuliyev, F. T. Attempt at seismic microregionalization of the Apsheron Peninsula 197-79
—— Problems of the seismic microregionalization of the Apsheron Peninsula 201-69

Kuliyeva, R. N. See Dubrovskiy, V. G.

Kulkarni, R. N. Relation between atmospheric ozone and geomagnetic disturbance 201-265

Kullerud, Gunnar. See Ramdohr, P.

Kulm, L. D. See Osterberg, Charles.

Kulp, J. L. Potassium-argon dating of volcanic rocks 203-4

Kulp, J. L., Kologrivov, R., Haller, John, and Koch, Lauge. Further isotopic age measurements on rocks from north-eastern Greenland 196-11
See also Fanale, F. P., Haller, John, Long, L. E., Miller, D. S., and Wampler, J. M.

Kun, V. V. Side waves diffracted and refracted at a vertical contact (according to data of modeling) 195-90

Kund, G. G. See Zhiglinskiy, A. G.

Kunetz, Gésa, and d'Erceville, I. On certain generalizations of the correlation coefficient 192-164
—— On certain properties of a plane acoustic wave of compression in a stratified medium 197-117
See also Baranov, V. I., d'Erceville, I., and Weaver, J. T.

Kunii, D., and Smith, J. M. Thermal conductivities of porous rocks filled with stagnant fluid 200-230
See also Adivarahan, P.

Kuno, Hisashi. Frequency distribution of rock types in oceanic, orogenic, and kratogenic volcanic associations 202-316

Kunori, Soichi, and Ishii, Fujio. Geo- and electro-chemical studies of ore deposits (3d report) 192-127

Kunz, K. S. See Moran, J. H.

Kuo, J. T., and Nafe, J. E. Period equation for Rayleigh waves in a layer overlying a half space with a sinusoidal interface 192-109
See also Ewing, Maurice.

Kupalov-Yaropolk, I. K. Synthetic seismograms 200-330

Kupovykh, P. N. See Gulin, Yu. A.

Abstract

Kuptsov, K. S. See Rogov, B. I.
Kurimoto, Hiroshi. A study on frequency distribution of earthquake magnitude, having respects to depth and time ------------------ 195-58
Kuroda, Hidetaka, and Kimura, Shigemasa. Field experiment of wave guide on Ariake Sea ------------------------------------ 199-330
Kurusu, K., and Yanagihara, Kazuo. The horizontal disturbing vector of geomagnetic pulsations, pc--------------------------- 195-254
See also Kawamura, M.
Kushiro Local Meteorological Observatory. Report on the Kishiro-oki earthquake of August 12, 1961 --------------------------- 193-66
Kusov, V. A. See Zverev, G. N.
Kusumgar, S., Lal, Devendra, and Sarna, R. P. Tata Institute radiocarbon dates I -- 203-35
Kuteynikov, Ye. S., and Istratov, V. V. New data on the structure of the Kyutingdin transverse downwarp (northeastern Siberian platform) -- 197-212
Kutscher, Fritz. Geophysical research in the Hessian iron ore areas--- 192-304
Kuvaldin, V. A. See Meyer, V. A.
Kuzhel'nyy, N. M. On the absolute age of the granites of the northwestern Altay --- 194-20
Kuzin, I. P. See Fedotov, S. A.
Kuzivanov, V. A., and Gaynanov, A. G. Measurement of the magnetic field in making marine pendulum ovservations ----------- 201-205
Kuzivanov, V. A., and Popov, Ye. I. Analysis of marine observations with observations with overdamped gravimeters----------- 201-204
Kuz'mina, N. V. Distinguishing interference surface waves with weak underground expulsive blasting ------------------------ 203-143
See also Bagdasarova, A. M.
Kuz'mina, Ye. A. See Cherdyntsev, V. V.
Kuznetsov, A. A. See Aleynikov, A. L.
Kuznetsov, A. N. Use of the telluric current method in the southeast part of the West Siberian Lowland ---------------------- 200-80
Kuznetsov, G. A. See Filippov, Ye. M., and Polak, L. S.
Kuznetsov, G. F. A means of determining the zero level of local gravity or magnetic anomalies ------------------------------- 193-201
—— Delineation of local gravity or magnetic anomalies by the use of a series expansion of the anomaly curve according to Chebyshev polynomials --- 193-206
Kuznetsov, K. K. See Gurevich, G. I.
Kuznetsov, V. P. See Bagdasarova, A. M.
Kuznetsov, V. V. See Yepinat'yeva, A. M.
Kuznetsov, Yu. I. Acoustic logging as a possible method of investigating the fissuring of rocks ----------------------------- 198-326
Kuznetsova, K. I. Effect of mechanical properties and rate of deformation on the character of failure of a schematic model of a heterogeneous medium and some actual materials ------------- 200-345

L

L. H. Smart Oil Exploration Company, Limited. Grey Range seismic survey, Queensland, 1959 ------------------------------ 192-341
Labeyrie, Jacques. See Pelletier, Henri.
Lacaze, J. R. Cold fronts that generate microseisms ------------ 200-303
See also Fontan, J.
Lachenbruch, A. H. Mechanics of thermal contraction cracks and ice wedge polygons in permafrost ----------------------------- 194-199
Lachenbruch, A. H., Brewer, M. C., Greene, G. W., and Marshall, B. V. Temperatures in permafrost ----- --------------- 202-170
LaCoste, L. J. B. See Nettleton, L. L.

Abstract

LaFehr, T. R., and Pakiser, L. C. Gravity, volcanism, and crustal deformation in the eastern Snake River Plain, Idaho ----- 193-225

Laffitte, Pierre. Thermal geochronology ----- 194-177

LaFoucriére, J. See Kouloumdjian, J.

LaGow, H. E., and Alexander, W. M. Recent direct measurements of cosmic dust in the vicinity of the Earth using satellites ----- 193-43

Lagrula, Jean. On the numerical evaluation of the differences between orthometric and normal heights ----- 193-169

Lakatos, Sándor. See Honfi, Ferenc.

Lakshmi, B. R., See Balakrishna, S.

Lal, Devendra. See Arnold, J. R., and Kusumgar, S.

Lamar, D. L. Optical ellipticity and internal structure of Mars ----- 197-61

Lamar, D. L., and Kern, J. W. Stability of the Earth's axis of rotation and phase changes ----- 192-246

Lamb, G. L., Jr. The attenuation of waves in a dispersive medium ----- 194-93

Landisman, Mark, Mueller, S., Bolt, B. A., and Ewing, Maurice. Transient analysis of seismic core phases ----- 197-101

See also Sykes, Lynn.

Landmark, B. See Ortner, J.

Landyreva, N. S., See Kondorskaya, N. V., and Vvedenskaya, N. A.

Langill, F. E. See Hodgson, J. H.

Langleben, M. P. Elastic properties of sea ice at ultrasonic frequencies ----- 193-348

Langleben, M. P., and Pounder, E. R. Elastic parameters of sea ice ----- 201-113

See also Graystone, Peter.

Lansiart, A. See Jouve, B.

Lantsov, A. Ye. See Berdichevskiy, M. N.

Lanzano, Paolo. A third-order theory for the equilibrium configuration of a rotating planet ----- 197-173

Lapin, S. S. Use of magnetic susceptibility of rocks and magnetite ores in structural-geological mapping of iron deposits ----- 198-253

Lapina, M. I., and Strakhov, V. N. New method of calculating the vertical derivatives of potential fields in an upper half space ----- 203-277

—— New method of computing elements of the magnetic field in the upper half space with a given distribution of the vertical component ΔZ on a plane ----- 198-272

LaPorte, M. Rapid construction of gravimetric maps deduced from the Bouguer anomaly with the help of an electronic calculator ----- 195-191

Larchenko, A. P. See Yakzhin, A. A.

Larionov, V. A. Utilization of singular points of anomalistic profiles of Z_a for interpretation of a magnetic field ----- 193-297

Larionov, V. V. Experience in using radiometric data from drill holes for evaluating reservoir properties of beds in the search for subsurface stores of gas in the Kaluga region ----- 197-318

Larochelle, André, and Black, R. F. An application of palaeomagnetism in estimating the age of rocks ----- 201-281

Larrabee, D. M. See Griscom, Andrew.

Larson, H. K. See Chapman, D. R.

Lasch, J. E. See Schmitt, R. A.

Laskina, V. V., Yanushevich, M. A., and Kornev, V. A. Tectonics of the gulf of Kara Bogaz Gol based on data of geophysical investigations ----- 200-217

Lasky, B. H. Surface alteration studies map subsurface structure - 200-225

Lasserre, Marc. See Gazel, Jacques.

Laster, S. J. See Gilbert, Freeman.

Lastochkina, N. M. Methodology of constructing structural plans of the deep structure of the Ust-Yenisei region on the basis of aeromagnetic data ----- 199-273

Abstract

Latynina, L. A. Differences in the course of displacements at near points on the Earth's surface ---------- 199-64

Latynina, L. A., and Karmaleyeva, R. M. First results of observations with a horizontal extensometer in the Tien-Shan ---------- 199-72

Laubenbakh, A. I. Principles of the interpretation of the gamma-field in prospecting for deposits of oil and gas ---------- 199-283

Laubscher, H. Earthquakes and tectonics in the Rhine Valley ---------- 198-65

Laughton, A. S. Sea floor -- morphology ---------- 192-356

Launay, L., Touitou, J., and Grenet, Gaston. The electrical conductibility of the upper mantle ---------- 203-228

Laurila, Matti. The geophysical "case history" of the Kalliokylä sulfide deposit ---------- 203-300

Laval, Jean. The elasticity of a crystalline medium and the elasticity of metallic crystals of cubic symmetry ---------- 200-119

Lavergne, Michel. Experimental research on seismic models ---------- 193-112

See also Bois, Pierre., and Fail, J. P.

Laves, F. See Hafner, Stefan.

Lavrent'yeva, Ye. V. A program of latitude observations for the Irkutsk and Poznan observatories ---------- 203-127

Lavrukhina, A. K. See Vinogradov, A. P.

Lawrie, J. A. The spatial distribution of rapid geomagnetic fluctuations ---------- 195-258

—— The spatial distribution of rapid geomagnetic fluctuations, Pt. 2 - 199-221

Lay, C. See Ledent, D.

Lazarus, A. J. See Bonetti, A.

Leakey, L. S. B. Age of basalt underlying Bed I, Olduvai ---------- 201-11

Lebeau, André, and Bitoun, Jacky. On the diurnal magnetic activity in high latitude regions and on a property of the solar wind ---------- 196-282

Lebeau, André, and Schlich, Roland. On a property of diurnal magnetic activity in high latitude regions (Charcot and Durmont d'Urville stations) ---------- 193-273

Lebeau, André, and Weill, Gilbert. A new type of geophysical event related to the solar eruption of July 3, 1957, and observed at the Dumont d'Urville Antarctic station ---------- 195-255

See also DeWitt, C.

Lebedev, A. M., Troitskiy, S. G., and Shashkin, V. L. Problem of the scale factor for the quantitative interpretation of gamma-logs ---------- 200-319

Lebedev, A. P. See Bakar, V. A.

Lebedev, T. S., and Korniyets, D. V. Experimental investigations of the physical properties of rocks at high pressures and temperatures ---------- 199-132

Lebedev, T. S., and Sobakar', G. T. Some features of the structure of the area northeast of the Sea of Azov according to data of geophysical investigations ---------- 193-159

Lebedev, T. S., Sobakar', G. T., Orovetskiy, Yu. P., and Bolyubakh, K. A. Geologic structure in the zone of junction of the Pokrovo-Kireyev and Tel'manov blocks in the area northeast of the Sea of Azov ---------- 193-303

—— New data on the structure of the central part of the northern flank of the Crimean mountains according to the data of geophysical investigations ---------- 201-153

—— Tectonics of the central part of the north flank of the Crimean Mountains and experience of its study ---------- 203-211

See also Sobakar', G. T.

Lebedev, V. G. Recent tectonic movements in northern China ---------- 197-188

Lebedev, V. I. See Vinogradov, A. P.

Lebedev, Ye. B. See Khitarov, N. I.

Lebedeva, G. N., and Potap'yev, S. V. Use of converted waves for detailed study of the relief of the crystalline basement ---------- 193-341

Abstract

Lebedeva, T. M. See Byus, Ye. I.
Lebedinskiy, A. I., and Salova, G. I. On the amount of free water on Mars 196-98
Lechekhley, V. R. See Burkser, Ye. S.
Ledent, D., Lay, C., and Delhal, J. First data on the absolute age of ancient formations of the Kasai "basement" (southern Congo) 199-13
Ledersteger, Karl. Dynamic, static, and geometric flattening of the Earth 192-180
—— The normal spheroid of the Earth as a two-part equilibrium figure and the mean depth of the lithosphere 202-112
—— The physical relation between the static flattening and the internal structure of the Earth on the hypothetical basis of a six-parameter equilibrium figure 192-181
—— The principle of peeling and the Clairaut theory of heterogeneous spheroidal equilibrium figures 199-136
Ledoux, Y. See Delaplanche, J.
Lee, Chin-Nan. Distribution of earthquake foci in the Taiwan region and its tectonic significance 201-72
Lee, E. M. See MacDowall, J.
Lee, H. A. Method of deglaciation, age of submergence, and rate of uplift west and east of Hudson Bay, Canada 202-117
Lee, W. H. K. See Nason, R. D.
Leech, G. B. Metamorphism and granitic intrusions of Precambrian age in southeastern British Columbia 194-10
Leech, G. B., and Wanless, R. K. Lead-isotope and potassium-argon studies in the East Kootenay district of British Columbia 197-234
Leeds, D. J. See Duke, C. M.
Leenhardt, Olivier. Some American instruments and techniques of submarine geology 200-357
Lehmann, Martin. The geomagnetic regional survey of the Granulite massif and the Frankenberg Zwischengebirge 192-306
Lehner, F. E., Witt, E. O., Miller, W., and Gurney, R. D. A seismograph for lunar experiments 194-88
Leinbach, H. See Ortner, J.
Leman, Ye. P., Maslov, Yu. S., and Kholmyanskiy, M. A. Experience in the use of geophysical investigations in boreholes in connection with prospecting for gold deposits in South Yakutia 197-152
LeMarne, A. E. See Sass, J. H.
Lenchek, A. M. See Liwshitz, Mordehai.
Lensen, G. J. See Ridder, N. A. De.
Leonov, N. N. See Gzovskiy, M. V.
Lepley, L. K. Submarine topography of the head of Barrow Canyon 193-355
Leroi-Gourhan, Arlette. See Solecki, R. S.
Leshchikov, F. N. The use of vertical electrical sounding for the study of seasonal freezing and thawing of grounds 193-135
Lesis, I. P., and Gudelis, V. K. Vertical movements of the Earth's crust in the territory southeast of the Baltic Sea according to precise leveling data 195-160
Létolle, René. Observations on the isotopic composition of the potassium of certain rocks 194-229
—— The geochemistry of the stable isotopes 194-226
—— Variations of the isotopic composition of potassium with its geologic origin 194-230
Létolle, René, and Mercier, J. On the absolute age of a galena associated with the "Dorianite" of Métallikon-Macedoine (Preliminary note) 203-15
See also Glangeaud, Louis, and Jouve, B.
Lettau, H. H. A theoretical model of thermal diffusion in nonhomogeneous conductions (with applications to conditions in the Moon's crust) 199-44

Abstract

Leutwein, Friedrich. See Kaplan, Gregoire.

Lev, I. S. Adaption of the PKG-1 composite geophone grouping attachments to the SS-30/60 and SS-24P seismic stations --------- 199-333

See also Grodzenskiy, V. A.

Levallois, J. J. General considerations on the reductions of gravity -- 192-207

—— The rehabilitation of classical and of three-dimensional geodesy -- 203-167

Le Van, D. C., and Pharr, R. F. A magnetic survey of the Coastal Plain in Virginia --- 199-267

Levchenko, I. G. See Vasilenko, V. K.

Levi, V. A. Seismic logging on a single-strand cable------------- 199-320

Levin, B. Yu. On the fragmentation of meteoritic bodies---------- 201-34

Levin, D. V. See Karasik, A. M., and Kryukov, S. M.

Levin, F. K., and Ingram, J. D. Head waves from a bed of finite thickness --- 194-97

See also Van Sandt, D. R.

Levitskaya, A. Ya. Earthquakes of the Urals ------------------- 192-78

—— Seismicity of the Crimea ------------------------------------ 192-62

See also Byus, Ye. I., and Yevseyev, S. V.

Levitskiy, L. S. See Dvoryashin, A. S.

Levshin, A. L. Propagation of surface waves in unconsolidated rocks-- 200-323

Levshin, A. L., and Goryainov, N. N. Propagation of longitudinal seismic waves in arenaceous rocks ------------------------ 193-328

Levskiy, L. K. Diffusion of helium from stone meteorites -------- 202-29

—— On the isotopic composition of xenon in meteorites ----------- 193-32

See also Gerling, E. K.

Levykin, A. I. Attenuation of ultrasonic waves in rock specimens at different frequencies -- 199-79

Leykin, A. Ya. See Bryzzhev, L. D.

Leypunskaya, D. I., Rezvanov, R. A., and Drynkin, V. I. Uses of neutron activation analysis in geology ------------------------ 193-325

See also Belen'kiy, B. V., and Kaipov, R. L.

Li, Y-Shu. Calculating the parameters used in telluric current prospecting --- 201-60

—— The problem of vertical faults in telluric current prospecting -- 201-59

Liang, W. L. See Clay, C. S.

Libby, W. F. Accuracy of radiocarbon dates -------------------- 200-7

—— Moratorium tritium geophysics ----------------------------- 203-237

See also Fergusson, G. J.

Lichkov, B. L., and Shafranovs'kiy, I. I. Critical parallels of the Earth's ellipsoid and their angular analogies in crystals -------- 196-203

Liebscher, H. J. Reflecting horizons of the deeper Earth's crust in the Alpine foreland of Bavaria, derived from the results of seismic reflection surveying ------------------------------------- 192-339

Liestol, Olav. Discovery of a tree stump in front of Engabreen, Svartisen -- 203-11

Likins, R. C. See Rubin, Meyer.

Lilley, Edward. See Barrett, A. H.

Limasset, J.-C. See Gazel, Jacques.

Lin, W. C. See Akasofu, S. I.

Lincoln, J. V. See Hakura, Y., and Shapley, A. H.

Lindell, S. See Hultqvist, Bengt.

Linden, N. A. Earthquakes of the Far Eastern zone -------------- 192-76

—— Seismicity of the Soviet Arctic ----------------------------- 192-79

Linden, N. A., and Savarenskiy, Ye. F. Seismicity of the Kopet Dag zone --- 192-67

Lindley, R. H. The use of differential sonic-resistivity plots to find movable oil in Permian formations ----------------------- 193-144

Abstract

Lingenfelter, R. E. Production of carbon 14 by cosmic-ray neutrons 199-205

Linington, R. E. The application of geophysics to archaeology 197-171

Lin'kov, Ye. M. Attempt at tracking cyclones by means of observations of microseisms on the polarization apparatus 197-302

Lin'kov, Ye. M., and Tripol'nikov, V. P. Some results of observation of microseisms using a polarization apparatus and a tripartite station 199-276

Lin'kov, Ye. M., Tripol'nikov, V. P., and Sabantsev, S. B. Polarization seismic installations 197-303

Lin'kova, T. I. Some results of paleomagnetic investigations of sedimentary rocks of the Devonian 201-283

Lipilin, V. A. See Moskvichev, Ye. I.

Lippolt, H. J., and Gentner, W. Argon determinations on potassium minerals -- 10. Attempt at potassium-argon dating of fossils 196-2

See also Gentner, W.

Lishnevskiy, E. N. Density and magnetic susceptibility of rocks of the Zeya-Bureya basin 199-240

List, B. H. See Green, A. W., Jr.

Litinskiy, V. A. A high-accuracy magnetic survey under Arctic conditions 199-271

Litvinenko, I. V. New seismic data on the crustal structure of the Baltic shield 200-338

Litvinenko, I. V., and Nekrasova, K. A. Features of deep seismic sounding on the Baltic shield 194-344

Litvinenko, O. K., and Makarov, V. A. Solution of the direct problem of gravity surveying for three-dimensional convex bodies (seismic structures) by use of electronic computers 199-161

Liu, Kuo-Chien; T'ien, Ko-Ch'in; Yao, Kuo-Hsiang; Wang, Huai-Yin; and Lü, Chih-Liang. Ground radioactive methods of prospecting for oil and gas deposits 193-316

Liu, Pao-Shen. Motion of rock masses due to the advancing exploitation butt in the light of the theory of stochastic media 192-355

Liwshitz, Mordehai, and Lenchek, A. M. Impulsive injection of electrons into the Earth's inner trapping region from solar cosmic-ray events 202-206

Lliboutry, Louis. The thermal regime and deformation of the base of the polar icecaps 203-185

Lobach-Zhuchenko, S. B. Absolute age of the rocks within the limits of basement blocks 200-43

Lock, M. H. Axially symmetric elastic waves in an unbounded inhomogeneous medium with exponentially varying properties 198-90

Lockhart, L. B., Jr. Natural radioactive isotopes in the atmosphere at Kodiak and Wales, Alaska 193-313

Loeb, J. The wave surface in an anisotropic elastic medium 199-75

Logachev, A. A. Course in magnetic surveying 202-230

Logovskaya, G. K. Determination of the porosity of sandy-silty reservoirs of the oilfields of the Kura district 201-143

Logvinets, M. N. See Auzin, A. K.

Lokken, J. E., Shand, J. A., and Wright, C. S. A note on the classification of geomagnetic signals below 30 cycles per second 192-258

See also English, W. N., and Jacobs, J. A.

Lomanyy, V. D., Prokof'yev, A. G., and Yanovskiy, B. M. Measurement of the components of the magnetic field of the Earth by the proton resonance method 196-279

Loncarevic, B. D. Accuracy of sea gravity surveys 199-166

London, Julius, and Matsushita, Sadami. Periodicities of the geomagnetic variation field at Huancayo, Peru 199-229

Long, Austin. See Damon, P. E.

Abstract

Long, C. L. See Bromery, R. W., Dempsey, W. J., and Johnson, R. W., Jr.

Long, J. V. P. See Agrell, S. O.

Long, L. E. Isotopic age study, Dutchess County, New York ------ 192-5

Long, L. E., and Kulp, J. L. Isotopic age study of the metamorphic history of the Manhattan and Reading Prongs ------------ 192-4

See also Dodson, M. H.

Longinelli, A. See Ferrara, Giorgio.

Longman, I. M. A Green's function for determining the deformation of the Earth under surface mass loads. 2. Computations and numerical results ------------------------------------ 195-80

See also Harrison, J. C.

Lonskiy, A. V. See Kal'varskaya, V. P.

Loomer, E. I. Record of observations at Fort Churchill magnetic variometer station 1957-1958 -------------------------------- 202-203

Loos, Yu. A. Geology of the Kanelov structural step according to seismic survey data-------------------------------------- 198-341

Lopatina, G. B., and Fel'dshteyn, Ya. I. Geomagnetic effects in the ionosphere-- 200-265

Lopes, J. J. B. See Serafim, J. L.

López, R. O. Results of aerial prospecting for uranium in the region of the Rio Juramento, Province of Salta-------------------- 195-312

López Arroyo, Alfonso. See Båth, Markus.

Lopovok, T. A. Neutron reactor for activation analysis of geologic specimens -- 193-326

Loriol, J.-P. de. The Jorat magnetic anomaly, its extension to the French shore of Lake Geneva (Study of the vertical component) -- 200-297

Lorius, Claude, and Merlivat, Liliane. On the charcterization of the ice of ice caps on the basis of the deuterium content -------- 197-231

Lossovskiy, Ye. K. On the dependence of the amplitude coefficient of plane wave propagation on frequency ---------------------- 201-106

See also Sollogub, V. B.

Louis, Pierre. Geologic interpretation of a part of the gravimetric map of the Logone basin (Tchad Republic) ------------------- 196-239

Love, J. D., and Taylor, D. W. Faulted Pleistocene strata near Jackson, northwestern Wyoming ----------------------------- 193-180

Lovering, J. F. The evolution of the meteorites - Evidence for the co-existence of chondritic, achondritic and iron meteorites in a typical parent meteorite body ------------------------------ 197-45

Lovering, J. F., and Morgan, J. W. Uranium and thorium abundances in possible upper mantle materials-------------------- 198-208

Lovering, J. F., and Parry, L. G. Thermomagnetic analysis of co-existing nickel-iron phases in iron meteorites and the thermal histories of the meteorites ---------------------------------- 194-41

See also Easton, A. J., and Greenland, L. P.

Lovering, T. S., and Goode, H. D. Measuring geothermal gradients in drill holes less than 60 feet deep, East Tintic district, Utah--- 203-213

Lovering, T. S., McCarthy, J. H., and Friedman, Irving. Significance of O^{18}/O^{16} and C^{13}/C^{12} ratios in hydrothermally dolomitized limestones and manganese carbonate replacement ores of the Drum Mountains, Juab County, Utah---------------------- 201-236

Lovlya, S. A. See Yevdokimov, G. S.

Lovtsyus, A. V. See Krylov, A. Ya., and Starik, I. Ye.

Lovtsyus, G. P. See Starik, I. Ye.

Lowdon, J. A. Isotopic ages -- Report 3 198-11

See also Wanless, R. K.

Lowes, F. J., and Wilkinson, I. Geomagnetic dynamo: a laboratory model -- 201-243

Abstract

Lowman, P. D., Jr. Tektites vs. terrestrial rocks: a comparison of variance in compositions 194-48

—— The relation of tektites to lunar igneous activity 203-53

See also O'Keefe, J. A.

Lowrey, A. R. See Proctor, C. M.

Lozano Calvo, Luis. See Morelli, Carlo.

Lozenskaya, A. M. A string microbarometer 201-206

Lozhenitsyna, L. V. See Van'yan, L. L.

Lü, Chih-Liang. See Liu, Kuo-Chien.

Lucca, L. D. See Soberman, R. K.

Luchitskiy, I. V. Relationships of volcanism to tectonics as exemplified by the Minusinsk downwarp 202-136

Lucke, Otto, and Wagner, C. U. The dynamic equations in the magnetosphere, pt. 2 192-256

Ludwig, W. J., Ewing, Maurice, Ewing, J. I., and Drake, C. L. Discussion of a paper by C. H. Savit, D. M. Blue, and J. G. Smith, "Exploration seismic techniques applied to oceanic crustal studies" 193-336

See also Ewing, Maurice

Lugn, R. V. See Moore, H. J.

Lugovenko, V. N. Detection of local magnetic anomalies of smallest scale ("elementary anomalies") 201-295

—— Nomograms for determination of the anomalous value of the horizontal component of the geomagnetic field and its projection of a computed profile 201-250

Lukavchenko, P. I. Observations with gravimeters in wells and shafts 196-230

Lukhminskiy, B. Ye. See Gorskiy, Ya. Ya.

Luk'yanova, N. N. On the use of the electronic computer for construction of a contact gravitating surface 193-203

Lunarskiy, G. N., and Neprochnov, Yu. P. Test of the use of seismoacoustic radio buoys in deep seismic sounding on the Black Sea 194-332

See Neprochnov, Yu. P.

Lund, I. A. See Mount, W. D.

Lundqvist, Gösta, and Nilsson, Erik. Highest shore-lines of the sea and ice dammed lakes in the late Quaternary age 198-156

Lungergausen, G. F. Some features of the expression of recent tectonics in the east Siberian platform 195-166

Lungergausen, G. F., and Rakovets, O. A. Recent tectonics of the Gornyy Altay 195-171

Lutsuk, Ye. M. See Kornev, V. A.

L'vov, B. K. See Komlev, L. V.

L'vov, Yu. A. See Plekhanov, G. F.

Lyamzina, G. A. On the study of the seismic properties of grounds for seismic microregionalization 197-81

See also Medvedev, S. V., and Yershov, I. A.

Lynch, E. J. Formation evaluation 200-170

Lynn, R. D. A low-frequency geophone for borehole use 200-335

Lyon, R. J. P., and Burns, E. A. Analysis of rocks and minerals by reflected infrared radiation 198-40

Lyttleton, R. A. A cometary mechanism for the formation of tektites 201-44

—— Formation of mountains by radial contraction of the Earth 196-211

—— The effect on the lunar orbit of meteoritic accretion 193-59

See also Kopal, Zdeněk.

Lyubavin, Yu. P. See Kolesov, B. M.

Lyubimova, Ye. A. Distribution of thermoelastic stresses within the Earth and their rate of accumulation 201-224

Abstract

Lyubimova, Ye. A. On the conditions of generation of magmatism and the role of volcanoes in the thermal regime of the Earth's crust ---------- 202-167
—— Thermoelastic stresses in the interior of the globe ---------- 193-234
Lyustikh, Ye. N. On the paper of B. A. Andreyev "Faye gravity anomalies and isostasy" ---------- 199-158
—— Some comments on the use of physics in geotectonic constructions ---------- 198-150

M

Ma, T. Y. H. A recomparison of paleomagnetic latitudes and paleogeographical latitudes deduced from growth values of reef corals ---------- 203-276
—— Climate and the relative positions of continents during the Permian as deduced from the growth rate of reef corals ---------- 202-141
Maaz, R. See Ullmann, Wolfgang.
Mabey, D. R., and Armstrong, F. C. Gravity and magnetic anomalies in Gem Valley, Caribou County, Idaho ---------- 193-224
Mabey, D. R., Tooker, E. W., and Roberts, R. J. Gravity and magnetic anomalies in the northern Oquirrh Mountains, Utah ---------- 197-204
See also Brokaw, A. L., and Carlson, J. E.
McBirney, A. R. Factors governing the nature of submarine volcanism ---------- 203-332
Macagno, E. See Frank, L. A.
McCall, G. J. H. Classification of calderas: "Krakatoan" and "Glencoe" types ---------- 195-350
McCamy, Keith, Meyer, R. P., and Smith, T. J. Generally applicable solutions of Zoeppritz' equations ---------- 192-106
MacCarthy, G. R. Three forgotten earthquakes ---------- 198-55
McCarthy, Howard. See Brokaw, A. L.
McCarthy, J. H. See Lovering, T. S.
McConnell, R. K., Jr. Comments on letter by H. Takeuchi, "Time scales of isostatic compensations" ---------- 202-116
McCracken, C. W., and Alexander, W. M. The distribution of small interplanetary dust particles in the vicinity of Earth ---------- 201-35
See also Dubin, Maurice.
McDaniel, G. O., Jr. Parameters of subsurface structural reconnaissance in the Simpson group (Ordovician), South Norman area, Oklahoma ---------- 198-135
See also Norden, J. A. E.
McDonald, F. B. See Bryant, D. A.
Macdonald, G. A. Physical properties of erupting Hawaiian magmas ---------- 203-337
—— The 1959 and 1960 eruptions of Kilauea Volcano, Hawaii, and the construction of walls to restrict the spread of the lava flows - 202-330
Macdonald, G. A., and Hubbard, D. H. Volcanoes of the National Parks in Hawaii ---------- 195-345
MacDonald, G. J. F. Orientation of anisotropic minerals in a stress field ---------- 195-329
Macdonald, N. J., and Ward, F. W., Jr. The prediction of geomagnetic disturbance indices. 1. The elimination of internally predictable variations ---------- 200-261
Macdonald, W. J. P. See Robertson, E. I.
McDougall, Ian. Potassium-argon age measurements on dolerites from Antarctica and South Africa ---------- 198-22
—— Potassium-argon ages from Western Oahu, Hawaii ---------- 198-10
—— Potassium-argon ages of some rocks from Viti Levu, Fiji ---------- 202-25
McDougall, Ian, Compston, W., and Hawkes, D. D. Leakage of radiogenic argon and strontium from minerals in Proterozoic dolerites from British Guiana ---------- 202-11
See also Webb, A. W.

Abstract
MacDowall, J., and Lee, E. M. Seismological observations ------ 197-70
McElhinny, M. W., and Gough, D. I. The paleomagnetism of the Great Dyke of Southern Rhodesia ------------------------------ 199-244
McEvilly, T. V. See Nuttli, Otto.
McFarland, H. F. Water is where you find it -------------------- 192-132
McGillem, C. D., and Miller, B. P. Lunar surface roughness from crater statistics -- 194-62
—— Reply [to discussion of paper "Lunar surface roughness from crater statistics" --- 198-37
McGinnis, L. D. Earthquakes and crustal movement as related to water load in the Mississippi Valley Region------------------- 201-73
McGowan, E. F. See Anderson, L. A., Blanchett, Jean, and Bromery, R. W.
McGrath, J. G. See Roach, C. H.
Machida, Tadao. See Ono, Hironori.
McIntire, W. G. Mauritius: River-mouth terraces and present eustatic sea stand --- 193-165
McIntosh, R. A. Features of the lunar crater Aristarchus -------- 196-90
MacKallor, J. A. Aeroradioactivity survey and areal geology of the Georgia Nuclear Laboratory area, northern Georgia (ARMS-1) --- 200-312
—— Natural gamma aeroradioactivity of the Georgia Nuclear Laboratory area, Georgia ------------------------------------- 197-314
MacKallor, J. A., Moxham, R. M., Tolozko, L. R., and Popenoe, Peter. Radioactivity and geologic map of the Tordilla Hill-Deweesville area, Karnes County, Texas--------------------- 197-315
McKee, E. D., Reynolds, M. A., and Baker, C. H., Jr. Experiments on intraformational recumbent folds in crossbedded sand-- 193-349
—— Laboratory studies on deformation in unconsolidated sediment-- 193-350
McKellar, I. C. See Goldthwait, R. P.
Mackey, John. See Barker, Harold.
McKinney, C. R. See Silver, L. T.
McLaughlin, W. A. See Hsu, K. J.
McLelland, J. I. Preliminary drilling phase of Mohole project. III. Summary of logging operations (La Jolla and Guadalupe sites) --- 192-244
McLemore, E. W. Probability studies in three variants: seismic velocity, depth, and lithology --------------------------------- 200-320
McNicol, R. W. E. See Wilkie, J. R.
McQueen, R. G., Fritz, J. N., and Marsh, S. P. On the equation of state of stishovite -- 199-198
Maechler, Paul. See Forrer, Robert.
Maeda, Hiroshi, Sakurai, K., Ondoh, T., and Yamamoto, M. A study of solar-terrestrial relationships during the IGY and IGC --- 197-251
See also Shirgaokar, A. J.
Maéda, Kenjirō. See Nakamura, Hisayoshi.
Maeda, Yoshihiro. See Hagiwara, Takahiro.
Maffei, Paolo. Moon maps of yesterday and of today ------------ 196-67
Magda, Wilhelm. See Przewlocki, Kazimierz.
Magellan Petroleum Coporation. North Winton gravity survey, Queensland, 1959 --- 192-234
Maggs, D. See Hawkins, L. V.
Magnée, Ivan de, and Nairn, A. E. M. The paleomagnetic method. Application to the Malmédy conglomerate -------------------- 203-275
Magnitskiy, V. A., and Khorosheva, V. V. The waveguide in the mantle of the Earth and its probable physical nature ----------- 192-99
Mahadevan, C., and Aswathanarayana, U. Age levels of Precambrian orogenic cycles of India -------------------------------- 202-23
Makaridin, N. A. See Gershanovich, I. M.
Makarov, A. N. See Semenov, A. S.
Makarov, V. A. See Litvinenko, O. K.
Makiyama, Jiro. Rock mechanics in a blueprint------------------ 199-356

Abstract

Makowiecki, L. Z. A. Geophysical Division. Geohydrological survey in Barbados 203-158
—— Geophysical Division. Gravity survey in Kenya 203-205
—— Geophysical Division. Investigations in Tanganyika and Kenya 203-159
—— Geophysical Division. Overseas Geological Surveys, 1950-1961 202-105
Mal, A. K. Attenuation of Love-wave in the low-period range near volcanic island margin 193-94
—— Dispersion of Love waves in a spherical earth with corrugated surface 196-155
—— On the field of an electric dipole in presence of a layered media 196-177
—— On the frequency equation for Love waves due to abrupt thickening of the crustal layer 197-123
—— On the generation of G-waves 201-104
Malakhov, A. A., and Zhelebov, P. P. On the deep geology of the central Urals 197-210
See also Khalevin, N. I.
Malaroda, Roberto. See Baggio, Paola.
Maleyev, Ye. F. On the dependence of the composition of the volcanic formations on the orientation of fractures in the Soviet Carpathians 202-132
Malinin, V. F. See Orlov, L. I.
Malinovskaya, L. N., and Chechel', I. I. On the distortion of nonstationary oscillations in galvanometric registration 194-110
See also Keylis-Borok, V. I.
Malkus, W. V. R. Processional torques as the cause of geomagnetism 200-245
Malovitskiy, Ya. P. Combined magnetic and gravimetric character of the Donets Basin and adjacent territories in connection with the elucidation of their geologic structure 201-214
Malushin, I. I. A method of constructing reflecting boundaries in seismic surveying by the reflection method 199-313
Malý, Vratislav. See Šamšula, Jiří.
Malygin, A. A. Some geologic-magnetometric data on the magmatic complexes of the Leninogorsk district of the Rudniy Altay 193-304
Mamedov, Sh. N., and Osipova, B. A. Problem of rock pressure in the Nakhichevan salt mine 198-351
Manchee, E. B. Direct integration of the data of continuous acoustic logging 202-278
Mandelbaum, Hugo. Statistical and geological implications of trend mapping with nonorthogonal polynomials 195-134
Mandel'baum, M. M. Geology and oil and gas possibilities of the Upper Angara dislocation zone 195-325
Manger, G. E. Porosity and bulk density of sedimentary rocks 203-156
Mankin, C. J. See Norden, J. A. E.
Mann, W. B., Marlow, W. F., and Hughes, E. E. The half-life of carbon-14 193-7
Manning, G. K. See Maringer, R. E.
Mansfield, R. H. See Rommey, Carl.
Mansur, Ahmed. See Beaufils, Yvonne.
Mansurov, S. M. Secular variation of the geomagnetic elements at the Mirnyy Observatory 198-231
—— The nature of geomagnetic variations of a special type (SVD) 198-235
Mansurova, L. G. Geomagnetic standard level of the USSR 195-244
Manyuta, M. G. See Demidenko, Yu. B.
Marabini, R. See Gershanik, Simon.
Maranzana, F. See Mosetti, Feruccio.
Mardock, E. S. Radiometric methods of investigating wells and prospects of their development 198-307

Abstract

Margot'yeva, M. V. See Pomerantseva, I. V.
Marinelli, G. See Bordet, Pierre.
Marin-Fedorov, S. F. See Grumbkov, A. P.
Maringer, R. E., and Manning, G. K. Some observations on deformation and thermal alterations in meteoritic iron ---------- 197-42
Markhinin, Ye. K. On an important aspect of the problem of calderas ---------- 202-346
—— On the possibility of estimating the amount of juvenile water participating in volcanic explosions ---------- 202-326
Markhinin, Ye. K., and Pugach, V. B. On the magnetic susceptibility of the volcanic rocks of Kamchatka and the Kurile Islands-- 197-268
Markhinin, Ye. K., Pugach, V. B., and Markhinina, S. N. On the natural magnetization of the ash beds of the region of the Klyuchevskaya group of volcanoes ---------- 197-269
Markhinina, S. N. See Markhinin, Ye. K.
Markova, N. G. See Neyshtadt, M. I., and Serebryannyy, L. R.
Marlow, W. F. See Mann, W. B.
Marmo, Vladi. On the age of the Finnish basement ---------- 193-14
Marmorshteyn, L. M. The effect of overburden pressure on the physical properties of rocks ---------- 199-354
See also Gonor, A. L., and Guseva, A. A.
Marsh, S. P. See McQueen, R. G.
Marshall, B. V. See Lachenbruch, A. H.
Marshall, C. H. Geologic map and sections of the Letronne region of the Moon ---------- 200-64
—— Thickness and structure of the Procellarian System in the Lansberg region of the Moon ---------- 200-65
Marshall, R. R. Cosmic radiation and the K^{40}-Ar^{40} "ages" of iron meteorites ---------- 194-44
—— The composite origin of heavy elements and iron meteorites --- 193-18
Martel, Alex, and Meunier, Jean. Telluric prospecting in Nivernais ---------- 203-64
Martin, L. R. See Fredriksson, Kurt.
Martin, Maurice. See Doll, H. G.
Martin, Rudolf. Tektites, their nature and origin and their possible occurrence in Canada ---------- 195-25
Martin, Walter. Seismic refraction reconnaissance and special measurements in the German Democratic Republic ---------- 198-335
—— Seismic refraction survey measurements in the German Democratic Republic ---------- 194-324
Martinov, Sv. L. See Petrov, P. St.
Martin Romero, J. Behavior of the ground in the face of seismic vibration in the Alicante Demarcation ---------- 192-56
Martins, J. M., and Morelli, Carlo. Gravity tie Rome-Lisbon ---- 193-219
Martirosova, A. O. On the magnetic susceptibility of the sedimentary rocks of Azerbaijan ---------- 199-239
Martner, S. T., and Silverman, Daniel. Broomstick Distributed Charge ---------- 196-335
Márton, P., and Stegena, Lajos. On the basic principles of geophysical radioactive methods ---------- 196-311
Martynova, G. I. Interpretation of the V_{zzz} field in the Ust-Yenisei region (Malokhet anticline) ---------- 199-181
—— On the calculation of the systematic errors in approximately computed fields of the second vertical derivative of gravity------ 193-209
—— Some methods of graphical solution of direct and indirect problems of gravity prospecting using the fields of second gravity derivatives ---------- 194-203
See also Bezuglaya, L. S.
Marussi, Antonio. The results of geophysical research carried out in the Institute of Geodesy, Topography, and Geophysics of the University of Trieste ---------- 192-160

Abstract

Maruyama, Shuji. See Hayashi, Shoichiro.
Marvin, U. B. Cristobalite in the Carbo iron meteorite ---------- 195-19
Marych, M. I. Comparison of formulas proposed for determining the figure of the Earth---------- 194-179
Masarskiy, S. I. Seismicity of western Turkmenia ---------- 192-68
—— Traveltime surves of seismic waves of the Altay according to data of industrial explosions ---------- 202-90
Masarskiy, S. I., and Moiseyenko, F. S. On the seismicity of the Altay ---------- 194-74
Masarskiy, S. I., and Treskov, A. A. Methods of analysis of instrumental seismic observations ---------- 192-81
Maslenikov, V. A. Absolute age of the Polmos and Poros formations ---------- 200-33
—— Granites of the Lower Katarchean (essentially oligoclase granite gneisses, migmatites, pegmatites) ---------- 200-29
—— Mineralized pegmatite veins ---------- 200-39
—— Short survey of the geology of the region ---------- 200-28
—— Supercrustal and magmatic formations of the Proterozoic------ 200-40
Maslenikov, V. A., Priyatkina, L. A., and Borisova, K. D. Greissenized tourmaline gneissic granites ---------- 200-37
—— Microcline granites ---------- 200-41
See also Priyatkina, L. A.
Maslov, Yu. S. See Leman, Ye. P.
Mason, Brian. Meteorites ----------200-47, 200-48
—— Organic matter from space ---------- 199-29
—— The minerals of meteorites ---------- 197-43
Mason, Brian, and Wiik, H. B. The Holbrook, Arizona, chondrite- 192-21
—— The Kyushu, Japan, chondrite ---------- 192-22
—— The Miller, Arkansas, chondrite---------- 192-20
Massalski, T. B. Some metallurgical aspects in the study of meteorites---------- 197-41
Massalski, T. B., and Park, F. R. A quantitative metallographic study of five octahedrite meteorites---------- 193-25
Massey, D. S. See Chandler, J. B.
Massey, Harrie. The International Geophysical Year in retrospect- 200-169
Masson Smith, D., and Andrew, E. M. Gravity meter primary station net in east and central Africa ---------- 195-195
See also Gass, I. G.
Masuda, Akimasa. Discrepancy in age-determination involving radiogenic isotopes ---------- 200-3
—— Experimental method for determination of isotopic composition of lead in volcanic rock ---------- 203-238
Masurenkov, Yu. P., and Panteleyev, I. Ya. Recent activity of Elbrus Volcano ---------- 192-359
Masyukova, L. G. See Anpilogov, A. P.
Mather, K. B., and Wescott, E. M. Conjugate point relationships at high latitudes ---------- 203-256
—— Telluric currents at geomagnetically conjugate stations in the Aleutian Islands and New Zealand ---------- 194-65
Mathews, F. S. See Watt, A. D.
Mathieu, P. L. See Jones, L.
Matsuda, Tokihiko. Crustal structure of the South Fossa Magna, Japan, inferred from the geological data ---------- 195-217
See also Satō, Yasuo., and Sugimura, Arata.
Matsumoto, Takashi. On the origin of the Neogene volcanic series in southwest Japan ---------- 203-233
Matsuo, Tadayuki. See Kato, Yoshio.
Matsushima, Shogo. The mechanical properties of rocks under high pressure ---------- 202-295

Abstract
Matsushita, Sadami. On the notations for geomagnetic micropulsations ---------- 202-216
—— Reply [Discussion of paper "Hydromagnetic interpretation of sudden commencements of magnetic storms"] ---------- 200-270
See also London, Julius.
Matsuzawa, Akira. On the relationship between the density of sedimentary rock and the subsurface geology ---------- 192-236
Mattana, N., Sanna, S., and Serra, A. Diurnal behavior of the natural radioactivity at Cagliari ---------- 192-315
Matter, J. See Carter, R. M.
Matthews, D. H. A major fault scarp under the Arabian Sea displacing the Carlsberg Ridge near Socotra ---------- 202-307
Matumoto, Hideteru. See Aki, Keiiti, and Miyamura, Setumi.
Matuzawa, Takeo. Generation mechanism of earthquakes ---------- 195-62
Matuzawa, Takeo; Asada, Toshi; Den, Nozomu; and Takano, Kei. Tripartite observations of microseisms ---------- 197-301
Matveyev, B. K. See Ogil'vi, A. A.
Matveyev, B. M. Magnetic investigations on the schooner "Zarya"- 192-310
Matveyev, P. S. Harmonic analysis of earth tides (29 day series)-- 203-122
See also Ostrovskiy, A. Ye.
Matveyev, Ye. I. See Yakubov, A. A.
Matveyeva, I. I. See Gerling, E. K.
Mauersberger, Peter. On the functional determinant of velocity according to the coordinates in magnetohydrodynamics ---------- 195-236
—— The dependence on altitude of the magnetic normal field of 1935.0 for central Europe ---------- 195-301
Maureau, G. T. See Jones, G. H. S.
Mavritskiy, B. F. West Siberian artesian basin ---------- 199-188
Maxwell, A. E. See Von Herzen, R. P.
Maxwell, E. L. See Watt, A. D.
Maxwell, J. C. Experiments on compaction and cementation of sand ---------- 195-333
Mayaud, P.-N. Equatorial electrojet and magnetic activity ---------- 203-257
Mayeda, T. K. See Clayton, R. N.
Mayer, Armand. Recent work in rock mechanics ---------- 202-293
Mayne, W. H. Common reflection point horizontal data stacking techniques ---------- 196-326
Maysuradze, P. A. Some results of geomagnetic observations in the region of the southern geomagnetic pole ---------- 201-259
Mazanova, Z. V., Neyshtadt, N. M., and Osipov, L. N. Possibilities of the use of the seismoelectric method in prospecting quartz veins ---------- 196-184
Mechler, Pierre, and Rocard, Yves. Curvature and inclination of the Earth's crust in relation to the seismic amplitudes of strong explosions ---------- 196-171
—— General curvature of the Mohorovičić layer following the azimuth from a shot point, according to seismic amplitudes at a distance ---------- 195-103
Medd, W. J., and Broten, N. W. Lunar temperature measurements at 3200 mc/s ---------- 193-56
Medvedev, S. V. Determination of the intensity of earthquakes ---- 192-82
—— Energy of ground oscillations due to strong earthquakes ---------- 192-88
—— On the problem of the economic feasibility of earthquake-proof reinforcement of buildings ---------- 197-95
—— Qualitative data on ground movement in strong earthquakes ---- 203-88
Medvedev, S. V., Bune, V. I., Gzelishvili, I. A., Karapetyan, B. K., Kats, A. Z., Lyamzina, G. A., Piruzyan, S. A., Popov, V. V., Samkov, B. N., and Shaginyan, S. A. Instructions for carrying out seismic regionalization ---------- 197-72

Abstract

Medvedev, S. V., and Korf, M. G. Spectrums of displacements in earthquakes of 7 and 8 intensity, obtained on an electronic computer ---------- 197-97

Medvedev, V. S. See Budanov, V. I.

Meecham, W. C. Discussion on "The refraction arrival in water covered areas," by Charles B. Officer, Jr ---------- 201-327

Meerdink, E. F. See Alberda, J. E.

Meggers, B. J. See Evans, Clifford.

Meidav, Tsvi. Discussion on "Recent techniques for determination of in situ elastic properties and measurement of motion amplification in layered media," by R. J. Swain ---------- 200-118

Meinschein, W. G. Benzene extracts of the Orgueil meteorite ---------- 199-31
See also Nagy, Bartholomew.

Meiser, P. A method for quantitative interpretation of self potential measurements ---------- 196-174

Meissner, R. Wave-front diagrams from uphole shooting ---------- 196-333

Meitzner, Wolfgang. Magnetic investigations on the Backenberg near Güntersen ---------- 192-305

Melchior, P. J. Conclusions that it is now possible to derive from observations of earth tides ---------- 196-133

Melchior, P. J., and Pâguet, Paul. Conclusion of four years of earth tide recording carried out at the Royal Observatory of Belgium, at Brussels, by means of two gravimeters ---------- 201-90

Mel'kanovitskiy, I. M. Calculation of the correction for the attraction of an adjacent layer of mass for variable values of density ---------- 196-232

Mellor, Malcolm. The Antarctic Ice Sheet ---------- 194-198

Mel'nikov, A. M. See Begishev, F. A.

Mel'nikova, M. V. See Troitskaya, V. A.

Mende, Rastislav. Interpretation of the results of gravity investigations by the method of the second vertical derivative ---------- 193-195

Mendonça Dias, A. A. De. The submarine volcano of Capelinhos and the tectonics of the Azores ---------- 202-329

—— The volcano Capelinhos (Azores), the solar activity and the earth-tide ---------- 202-328

Men'kov, V. N. See Ivanov, N. A.

Mercier, J. See Létolle, René.

Merino y Coronado, J. New instruments - Capacitively coupled seismographs and accelerographs ---------- 200-105

Merkler, Gheorghe. Contributions to the interpretation of geomagnetic anomalies over the lamprophyre dikes in the Lausitz ---------- 195-299

Merle, Jacques. See Muraour, Pierre.

Merlet, Jacques. Note concerning the seismic phases between 100 and 200 km in the Hoggar massif ---------- 196-258

Merlivat, Liliane. See Lorius, Claude.

Merrihue, C. M. Excess xenon 129 in chondrules from the Bruderheim meteorite ---------- 195-17

Merritt, J. S. See Taylor, J. G. V.

Merz, Erich. The determination of hafnium and zirconium in meteorites by neutron activation analysis ---------- 194-30

Meshbey, V. I. On the problem of multiple reflections on the platform part of southwestern Ciscaucasus ---------- 199-342

—— Results of the application of regulated directional reception of seismic waves ---------- 200-331

—— Some problems of improving the quality of seismic traces in the complicated conditions of the southern edge of the West Kuban basin ---------- 194-322

Meshcheryakov, Yu. A. Polygenetic planation surfaces in the southeast Russian plain and their significance for neotectonic analysis ---------- 195-162

Abstract

Meshcheryakov, Yu. A. Recent movements of the Earth's crust in the north-west of the European part of U. S. S. R. in the light of geological and geomorphological data ------------------------ 194-193

Metallova, V. V., Zolotov, I. G., and Faynberg, F. S. Results of investigations of the magnetic properties of traps, southern part of the Siberian platform ------------------------------------- 197-267

Meunier, Jean. See Martel, Alex.

Meuschke, J. L., Johnson, R. W., Jr., and Kirby, J. R. Aeromagnetic map of the southwestern part of Custer County, South Dakota --- 202-242

Meuschke, J. L., and Zandle, G. L. Aeromagnetic maps of Massachusetts -- 203-282

—— Aeromagnetic maps of Vermont and Massachusetts------------ 203-279

See also, Balsley, J. R.

Mewherter, J. L. See Davis, W. D.

Meyer, A. A. Potential of a point source of a direct current in a half space with a linearly changing conductivity (resistivity) ----- 192-120

Meyer, A. U., and Roethlisberger, Hans. Electrical d-c resistivity measurements on glacier ice near Thule, Greenland--------- 197-147

Meyer, H. J. See Secor, G. B.

Meyer, R. P. See McCamy, Keith, and Willmore, P. L.

Meyer, V. A., and Kuvaldin, V. A. Portable automatic apparatus for magnetic logging on semiconductors ---------------------- 194-285

Meyer, V. A., Kuvaldin, V. A., and Bogdanov, B. N. The AMK-T apparatus for logging magnetic susceptibility on transistors ----- 197-270

Meyerhoff, A. A. See Northrop, J. W., III.

Michel, Robert. See Bonhomme, Michel.

Michiels, J. See Cuypers, M.

Mickey, W. V. Seismic effects from a high yield nuclear cratering experiment in desert alluvium ------------------------------ 203-147

See also Carder, D. S.

Miesch, A. T. See Davis, C. W.

Mikaelyan, Sh. S. Determination of porosity according to the relative value of natural potentials ------------------------------- 198-122

Mikerina, N. V. See Kovalevskiy, I. V.

Mikhalevskaya, A. D. See Komlev, L. V.

Mikhaylov, A. A. Most important problems of the study of the Moon -- 195-33

Mikhaylov, N. V. Methodology of investigating the structural-mechanical properties of elasto-plasto-viscous materials---------- 196-346

Mikhaylov, V. F. See Cherdyntsev, V. V.

Mikhaylov, Yu. Ya. See Rabinovich, B. I.

Mikhaylova, N. P. On the methodics of a magnetic traverse survey --- 193-294

—— On the remanent magnetization of the Tokov granites ---------- 200-276

Mikhaylova, N. P., and Tubina, L. A. Attempt at a petrographic classification of the gabbro-pyroxenites of the October alkaline massif according to the magnetic characteristics--------------- 196-286

Mikhaylovskiy, V. N., Pervyshin, V. N., and Tsykhan, A. I. Acoustic methods of underground geophysical surveying -------- 203-318

Mikheyev, G. F., and Feytel'man, N. G. Determination of the economic efficiency of the use of nuclear geophysical methods --- 199-302

Mikhota, G. G. Results of some experiments to study the dependence of intensity and frequency spectrum of seismic vibrations on charge weight -- 194-318

See also Aver'yanov, A. G., Gal'perin, Ye. I., and Veytsman, P. S.

Miklowitz, Julius. Transient wave propagation in elastic rods and plates -- 197-112

Abstract

Mikov, V. D. Interpretation of magnetic anomalies on the principle of similarity of space fields ---- 198-273

Mikumo, Takeshi. Mechanism of local earthquakes in Kwanto region, Japan, derived from the amplitude relation of P and S waves ---- 196-120

Milanovskiy, Ye. Ye. See Dumitrashko, N. V.

Milashev, V. A. See Rabkin, M. I.

Milashin, A. P. Tectonic regionalization of Sakhalin in the light of geophysical investigations ---- 198-140

Miles, J. W. Conical flow and Rayleigh scattering techniques in elastic wave propagation ---- 197-111

Millard, H. T., Jr. The rate of arrival of meteorites at the surface of the Earth ---- 202-27

Miller, B. P. See McGillem, C. D., and Salisbury, J. W.

Miller, C. H. See Healey, D. L.

Miller, D. S., and Kulp, J. L. Isotopic evidence on the origin of the Colorado Plateau uranium ores ---- 202-8

Miller, G. R. See Munk, W. H.

Miller, H. J. See Espinosa, A. F.

Miller, J. A., Barber, A. J., and Kempton, N. H. A potassium-argon age determination from a Lewisian inlier ---- 200-23

Miller, J. A., and Brown, P. E. An absolute age determination on the Mourne Mountain Granite ---- 200-22

Miller, J. A., and Harland, W. B. Ages of some Tertiary intrusive rocks in Arran ---- 203-10

Miller, J. A., and Mussett, A. E. Dating basic rocks by the potassium-argon method: the Whin Sill ---- 203-9

Miller, J. A., Shibata, Ken, and Kawachi, Yosuke. Potassium-argon ages of granitic rocks from the outer zone of Kyushu, Japan ---- 198-20

See also Binns, R. A., Hamilton, E., and Shibata, Ken.

Miller, W. F. The Caltech digital seismograph ---- 196-130

Millot, Georges. See Denozière, P.

Mil'nichuk, V. S. See Arabadzhi, M. S.

Milton, B. E., and Seedsman, K. R. Seismic survey, 1960 - Great Artesian Basin, South Australia and southwest Queensland. Preliminary Report ---- 193-344

Mina, U. F. Petroleum developments in Mexico in 1961 ---- 192-144

Minakami, Takeshi. Report on volcanic activity in Japan for the period from 1957 to 1959 ---- 202-318

Minasyan, G. N. Ionosphere and geomagnetic effects of large chromospheric flares ---- 201-266

Mineral Survey Team of the Ministry of Economic Affairs. Electrical prospecting at the Chinkuashih mine (first report) ---- 194-146

—— Electrical prospecting at the Chinkuashih mine (second report) - 194-147

—— Report on electrical prospecting at the Chiku iron sulfide deposit in Chihsingshan ---- 194-151

—— Report on electrical prospecting of the Szehuangtzeping sulfur-pyrite deposit ---- 194-152

—— Report on electrical prospecting at the Wan-li cupriferous pyrite mine ---- 194-150

—— Report on the Chinkuashih exploration projects, 1. (December 1955- June 1959) ---- 194-148

—— Report on the Chinkuashih exploration projects, 2. (October 1959-June 1960) ---- 194-149

Mineyev, D. A. See Stupnikova, N. I.

Ministerstvo Geologii i Okhrany Nedr SSSR. Instructions for seismic surveying ---- 203-317

Mirkina, S. L., Iskanderova, A. D., and Yefimov, K. P. Comparison of data of the lead and argon methods of determination of absolute age ---- 194-2

Abstract

Mirkina, S. L. See also Shukolyukov, Yu. A., and Zhidkov, A. Ya.

Mironov, V. S. On the calculation of the effect of relief in work with the GRBM-2 gradientometer ---- 197-192

Mironova, L. I. See Ostrovskiy, A. Ye.

Mironova, V. I. See Aver'yanov, A. G.

Miroshnichenko, V. P., and Shul'ts, S. S. Aerial methods of studying recent tectonics ---- 195-154

Misharina, L. A. Aftershocks of the Middle Baikal earthquake of August 29, 1959 ---- 195-50

See also Treskov, A. A., and Vvedenskaya, N. A.

Mishin, V. M., Kalinovskaya, G. P., and Mishina, N. A. Annual variation of magnetic activity according to IGY data ---- 198-237

Mishin, V. M., Naydenova, N. Ya., and Shukina, T. B. The annual variation of the frequency of occurrence of magnetic storms- 203-260

Mishin, V. M., and Nemtsova, E. I. Some conclusions from a comparison of magnetic disturbances in the northern and southern hemispheres ---- 198-238

Mishina, N. A. See Mishin, V. M.

Mistardis, G. On the beach rock of southeastern Greece ---- 202-118

Mitler, H. E. Helium 3 in planetesimals ---- 202-194

Mitra, Manindra. Disturbance in an elastic half-space due to an axially symmetric source of finite length ---- 199-76

Mitropol'skaya, O. N. The relation between the time lag of geomagnetic disturbances and relative sunspot number ---- 195-265

Mittempergher, M. See Bordet, Pierre.

Miyamoto, S. A geological interpretation of the lunar surface ---- 198-38

Miyamura, Setumi. A note on Fennoscandian seismicity ---- 202-53

—— Magnitude-frequency relation of earthquakes and its bearing on geotectonics ---- 192-84

—— Seismicity and geotectonics ---- 196-112

Miyamura, Setumi, Hori, Minoru, Aki, Keiiti, Tsujiura, Masaru, and Matumoto, Hideteru. Simultaneous operation of two seismometer-array stations in a study of micro-earthquakes in the Kanto and Chubu region ---- 200-88

Miyashiro, Akiho. Common occurrence of high-temperature plagioclase in chondrites ---- 200-54

—— The Kesen, Japan, chondrite ---- 200-52

—— The Mino, Japan, chondrite ---- 200-53

See also Murayama, Sadao.

Miyazaki, Yukio. Results of the Antarctic observation in the field of aeronomy ---- 199-220

Mizoue, Megumi. Regional gravity anomalies in northeast Japan--- 200-222

Mizutani, Yoshihiko. Origin of lower temperature fumarolic gases of Showa-Shinzan ---- 203-353

Mizyuk, L. Ya., and Kotyuk, A. F. Method of analysis of several schemes of aeroelectrical exploration ---- 198-107

Mizyuk, L. Ya., and Zubov, V. G. The KSR-T 1 computing automatic compensator on crystal triodes ---- 199-95

Moench, A. F. See Crowe, Christopher.

Mogi, Kiyoo. Experimental study on the mechanism of earthquake occurrences of volcanic origin ---- 203-359

—— Fracture of rocks ---- 202-296

—— Magnitude-frequency relation for elastic shocks accompanying fractures of various materials and some related problems in earthquakes (2d paper) ---- 200-90

—— On the time distribution of aftershocks accompanying the recent major earthquakes in and near Japan ---- 193-84

—— Study of elastic shocks caused by the fracture of heterogeneous materials and its relations to earthquake phenomena ---- 193-118

—— The fracture of a semi-infinite body caused by an inner stress origin and its relation to the earthquake phenomena (1 st paper)-- 200-89

Abstract

Mogi, Kiyoo. The influence of the dimensions of specimens on the fracture strength of rocks - Comparison between the strength of rock specimens and that of the Earth's crust ---------- 193-346
Mogilevskiy, E. I. A hypothesis of solar corpuscular streams with force-free magnetic fields ---------- 203-250
—— The penetration of localized magnetic fields into the solar corona and the generation of corpuscular streams having geomagnetic effects ---------- 198-225
Mohr, P. A. Surface cauldron subsidence with associated faulting and fissure basalt eruptions at Gariboldi Pass, Shoa, Ethiopa --- 202-336
Moiseyenko, F. S. On a means of separating an anomalous gravitational field ---------- 194-204
See also Masarskiy, S. I.
Molina, F., and Battelli, O. Seasonal variations of the Sq current system ---------- 193-279
Molina Berbeyer, Rafael. Microchemical method for the quantification of C-14 ---------- 200-8
Molochnov, G. V. Directional electromagnetic sounding ---------- 197-134
Molochnov, G. V., and Grebennikov, G. M. Comparison of the induction method with the electromagnetic dipole method on a thin conducting plate (on models) ---------- 197-135
Molodenskiy, M. S. Solution of the integral equation for determination of the figure of the Earth ---------- 192-174
Molodenskiy, M. S., Yeremeyev, V. F., and Yurkina, M. I. An evaluation of the accuracy of Stokes' series and of some attempts to improve his theory ---------- 192-168, 196-206
Molotkov, L. A., and Krauklis, P. V. Formation of low frequency head waves in thin layers ---------- 203-133
Molotova, L. V., Ivanova, T. G., and Temkina, E. A. On the problem of the procedure of seismic surveying of the crystalline basement in the Volga-Ural district ---------- 199-345
See also Vasil'yev, Yu. I.
Molyneux, L. See Da Sa, A.
Momoi, Takao. An example of application of the general method of treating water waves produced by a vibrating bottom with an arbitrary form ---------- 195-73
—— General method of treating water waves produced by a vibrating bottom with an arbitrary form ---------- 195-72
—— General method of treatment of tsunami caused by the displacement of a portion of the bottom with an arbitrary form ---------- 195-76
—— On gravity waves cuased by vibration of a bottom with a circular form (3 dimensional case) ---------- 196-126
—— On the directivity of water waves generated by a vibrating elliptic wave source ---------- 195-74
—— On water waves generated by vibrating elliptic wave origin ----- 196-127
—— Some remarks on generation of waves from elliptical wave origan ---------- 203-95
—— The Chilean tsunami of May 24, 1960 at Amami-Oshima ------- 203-97
—— The Chilean tsunami of May 24, 1960 in the vicinity of Choshi -- 203-98
—— The directivity of tsunami (1). The case of instantaneously and uniformly elevated elliptic wave origin ---------- 195-75
—— The directivity of tsunami (2). The case of instantaneously and uniformly elevated square wave origin ---------- 200-95
—— The directivity of tsunami due to the bottom irregularities (1) -- 203-96
—— The effects of coastlines on the tsunami (pts. 1, 2, and 3) and some remarks on the Chilean tsunami ---------- 200-94
Monakhov, F. I. Microseisms on the floor of the Baltic Sea and north part of the Atlantic Ocean ---------- 202-253
Monakhov, F. I., and Korchagina, O. A. Conditions of the formation and propagation of microseisms in the northwestern part of the Pacific Ocean ---------- 202-254

Abstract

Mongelli, F. First determination of the thermal conductivity of clays by means of a cylindrical probe (Preliminary note) -------- 196-249

—— On the thermal regime of a permeable insular region -------- 203-214

Mongelli, F, and Reina, C. Hydrogeothermal scheme of the Salentine Peninsula -------- 203-215

Monges C., Julio. See Kovach, R. L.

Monin, I. F. On the calculation of gravity anomalies, height of the quasigeoid, and plumbline deflections -------- 203-171

—— On the determination of the figure of the Earth with a relative error of the order of the square of the flattening of the Earth ellispoid -------- 202-113

—— On the determination of the figure of the topographic surface of the Earth with a relative error of the order of the square of the flattening of the Earth ellipsoid -------- 203-170

—— On the method of studying the figure of the Earth without using the normal field -------- 194-178

Montandon, Frédéric. The megaseisms in America -------- 198-63

Monteyne-Poulaert, G., Delwiche, R., and Cahen, Lucien. Ages of pegmatitic and vein mineralizations from Rwanda and from Burundi -------- 199-12

Monteyne-Poulaert, G., Delwiche, R., Safiannikoff, A., and Cahen, Lucien. Ages of pegmatitic and vein mineralizations of southern Kivu (eastern Congo). Preliminary indications on the ages of successive pegmatitic phases -------- 199-14

Moody, J. D. Petroleum developments in Africa in 1961 -------- 192-146

Moore, C. B. The petrochemistry of the achondrites -------- 197-44

Moore, C. B., and Brown, Harrison. Barium in stony meteorites - 202-28

—— The distribution of manganese and titanium in stony meteorites -------- 194-31

Moore, D. G. Geological observations from the bathyscaph Trieste near the edge of the continental shelf off San Diego, California --- 203-327

Moore, D. G., and Curray, J. R. Structural framework of the continental terrace, northwest Gulf of Mexico -------- 197-341

See also Buffington, E. D., and Shor., G. G., Jr.

Moore, H. J., Gault, D. E., Lugn, R. V., and Shoemaker, E. M. Hypervelocity impact of steel into Coconino sandstone -------- 194-58

Moore, J. G., Grantz, Arthur, and Blake, M. C., Jr. The quartz diorite line in northwestern North America -------- 198-196

Moore, J. G., and Reed, R. K. Pillow structures of submarine basalts east of Hawaii -------- 202-312

Moore, J. G., and Richter, D. H. Lava tree molds of the September 1961 eruption, Kilauea Volcano, Hawaii -------- 192-358

Moore, Patrick. Distribution and origin of lunar craters -------- 196-87

—— Lunar craters and the Moon's crust -------- 196-82

—— The classification of lunar walled formations -------- 196-91

—— The origin of the lunar rays -------- 196-95

Moore, R. C. Tectonic summary of the Backbone of the Americas - 201-184

Moore, Roosevelt. See Gottfried, David.

Mooser, Federico. The volcanoes of Colima -------- 195-349

Mooser, Federico, and Reyes Lagos, Armando. The volcanic group of Tres Virgenes, Municipality of Santa Rosalía, Territory of Baja California -------- 195-348

Moran, J. H., and Kunz, K. S. Basic theory of induction logging and application to study of two-coil sondes -------- 194-154

Morelli, Carlo. New experience with the Graf-Askania marine gravimeter -------- 192-217

—— New methods of research on the physics of the Earth, Pt. 3. Interior of the Earth -------- 202-172

—— Seismic experiments in the Dolomites (Lago Lagorai) to investigate the Earth's crust in the eastern Alpine area. II. Preparation and performance of the experiments "Lago Lagorai 1961"- 193-240

Abstract

Morelli, Carlo, and Lozano Calvo, Luis. Rome-Barcelona tie of the European gravimetric network ---------- 192-225

Morelli, Carlo, and Mosetti, Ferruccio. On the method of semi-analytical interpretation of the results of geophysical reliefs ---- 194-176

See also Allan, T. D., Gantar, C., Graham, K. W. T., and Martins, J. M.

Morgan, J. W. See Lovering, J. F.

Morgan, N. A., and Grant, F. S. High speed calculation of gravity and magnetic profiles across two-dimensional bodies having an arbitrary cross-section ---------- 200-285

Morgenstern, N. A relation between hydraulic fracture pressures and tectonic stresses ---------- 196-222

Mori, Kiyoshi. See Hayakawa, Masami.

Morimoto, Ryōhei. See Tsuya, Hiromichi.

Morishita, Toshizo. See Kanai, Kiyoshi.

Moritz, Helmut. An integral equation of the geoid ---------- 195-139

—— Interpolation and prediction of gravity and their accuracy ------ 194-200

—— Studies on the accuracy of the computation of gravity in high elevations ---------- 198-164

Morlet, J., and Schwaetzer, T. Amplitude measurements in wells: the attenuation log ---------- 197-338

—— Measurements of the amplitude of ultrasonic waves in boreholes ---------- 197-337

Morley, L. W. Prospecting for massive sulphide deposits with airborne electromagnetic devices ---------- 192-129

—— The Geophysics Division of the Geological Survey of Canada ---- 200-173

Moroz, V. I. On the "dust evelope" of the Earth ---------- 196-53

Morozov, V. P. On the problem of the conformal projection of an ellipsoid on a sphere ---------- 202-114

Morozova, G. M. See Krotevich, N. F., and Van'yan, L. L.

Morozova, I. M. See Gerling, E. K., Murin, A. N., and Vinogradov, A. P.

Morris, E. C. Albedo measurements in the Lansberg region of the Moon ---------- 200-70

Morris, E. C., and Stephens, H. G. Photographic investigation of the Earth-Moon libration regions L_4 and L_5 from Mt. Chacaltaya, Bolivia ---------- 200-71

See also Davis, C. W.

Morrison, H. F. See Bhattacharyya, B. K.

Morrison, R. P. A resumé of the geology of South America ------- 199-146

Morrisson, R. G. K. Synthetic rockbursts, pt. 1 ---------- 200-349

Morucci, J. C. See Létolle, René.

Mosen, A. W. See Schmitt, R. A.

Mosetti, Feruccio. An application of a new geoelectric method to mineral exploration ---------- 203-154

—— An application of geoelectric sounding: determination of the contact zone between fresh and saline water in calcareous formations ---------- 194-139

—— Introduction to a "differential sounding" of resistivity -------- 203-153

—— On the existence of a rhythm with a period of 45 years in some geophysical fluctuations ---------- 203-162

Mosetti, Feruccio, and Maranzana, F. On the law of variation of electric conductivity of a porous body as a function of its water content ---------- 194-167

Moskaleva, S. V. See Komarov, A. G.

Moskvichev, Ye. I., Kapit, B. F., and Lipilin, V. A. Analysis of tellurograms by the method of least squares ---------- 198-45

Moskvin, V. V. See Ponomarev, V. N.

Mount, D. L. Direct detection of oil and gas with the "Petroflex" -- 193-124
199-94

Abstract

Mount, W. D., and Lund, I. A. A simplified procedure for selecting predictors and deriving prediction equations 201-158

Moxham, R. M. Natural radioactivity in Washington County, Maryland 198-284

See also MacKallor, J. A.

Mozzhenko, A. N. Low-frequency seismic apparatus 194-330

Mrozek, Kazimierz. See Kozera, Alfons.

Mudretsova, Ye. A. Calculation of the lunisolar tidal effect on the results of gravimetric measurements 202-77

Mudretsova, Ye. A., and Borskiy, E. A. Compensation and estimation of the accuracy of the results of gravimetric measurements in underground mine workings 193-197

Muehlberger, W. R. See Denison, R. E.

Mueller, G. Interpretation of micro-structures in carbonaceous meteorites 195-21

Mueller, R. F. A comparison of oxidative equilibria in meteorites and terrestrial rocks 199-27

Mueller, S. See Landisman, Mark.

Muhleman, D. O. The electrical characteristics of the atmosphere and surface of Venus from radar observations 201-58

Mukhin, I. V. On the putting into production of the RK-60-L apparatus 198-309

Müller, Fritz. Analysis of some stratigraphic observations and radiocarbon dates from two pingos in the Mackenzie Delta area, N. W. T 196-10

Müller, Karel. See Homola, Vladimir.

Mulvey, J. H. See Foster, F.

Mumme, W. G. An investigation of the aeromagnetic maps of the Middleback Range area of South Australia 201-309

—— Stability of magnetization in Cainozoic basalts from Victoria, Australia 192-295

—— Thermal and alternating magnetic field demagnetization experiments on Cainozoic basalts from Victoria, Australia 199-237

Muncey, R. W. Properties of the lunar surface as revealed by thermal radiation 201-49

Munk, W. H., Miller, G. R., and Snodgrass, F. E. Long-period waves over California's continental borderland. Part 3. The decay of tsunamis and the dissipation of tidal energy 194-80

See also Haubrich, R. A.

Münnich, K. O. See Jacobshagen, V.

Munuera, J. M. The geomagnetic map of the Iberian Peninsula 199-269

Murai, Isamu. A brief note on the eruption of the Tokachi-dake Volcano of June 29 and 30, 1962 203-352

—— A brief note on the eruption of the Yake-dake Volcano of June 17, 1962 199-357

—— Pyroclastic flow deposits on various volcanoes in Japan 203-349

Muraishi, Yukihiko. See Nagata, Takesi.

Muramatu, Ikuei. Expression of earthquake danger with due consideration of the vibrational characteristics of earthquake motion (estimation of earthquake danger, Part 1) 201-77

—— Spectrum of earthquake motion and theory of resonance type anaylzer 201-76

Muraour, Pierre, Merle, Jacques, and Ducrot, Jean. Observations on the continental plateau as a result of a seismic refraction study in the Gulf of Lions 194-335

Murase, Tsutomu. Viscosity of volcanic rocks at 800° to 1,400°C 202-360

Murata, Ichiro. See Harada, Yoshimichi.

Murayama, C. See Hisamoto, S.

Murayama, Masaro. See Shibata, Ken.

Abstract

Murayama, Sadao, Miyashiro, Akiho, and Haramura, Hiroshi. The Sasagase, Japan, chondrite 200-55
Murgeanu, G. See Airinei, Stefan.
Murin, A. N., Banasevich, S. N., and Morozova, I. M. On the problem of diffusion of radiogenic gases from minerals 196-1
Muromtseva, Z. G. Tasks of geophysical work in the study of the Krivoy Rog iron ore basin 201-152
See also Panasenko, V. N.
Murozumi, Masayo. See Kayama, Izao.
Murphy, Thomas. Gravity anomaly map of Ireland, Sheet 4 - South East 201-208
—— Some unusual low Bouguer anomalies of small extent in central Ireland and their connection with geological structure 195-197
Murray, B. C. See Watson, Kenneth.
Murthy, B. S. Irregular fluctuations in H field at Kodaikanal 192-272
Murthy, V. R., and Schmitt, R. A. Isotope abundances of rare-earth elements in meteorites. 1. Implications of samarium, europium, and gadolinium to the Earth history of the solar system 196-32
Murthy, V. R., and Urey, H. C. The time of formation of the solar system relative to nucleosynthesis 193-19
Murty, A. V. S. See Ramanadham, R.
Murusidze, G. Ya., and Chichinadze, V. K. Method of determining mean velocities from the differences in the times of arrival of reflected and refracted waves registered beyond the point of origin 200-324
Musen, Peter. On a modification of Hansen's lunar theory 198-36
Musgrave, A. W. Applications of the expanding reflection spread 196-325
Mussett, A. E. See Miller, J. A.
Mustel', E. R. On the existence of a general field of corpuscles from the Sun 195-266
—— On the velocities of the corpuscles in the streams responsible for M-disturbances 195-267
—— Results of a statistical investigation of geomagnetic disturbances for five cycles of solar activity 195-269
Mustel', E. R., and Ayvazyan, S. A. Quantitative analysis of the statistical relationships linking flocculi and M-disturbances 195-270
Mužijevíc, R. S. Results of geophysical investigations in the exploration of oil pools in Vojvodina 193-157
Myaskovskiy, O. M. Some problems of the theory of radiowave propagation and its application for prospecting for fresh waters in deserts 202-97
Mysina, L. G. See Konstantinova, A. G.

N

Nabighian, M. N. The gravitational attraction of a right vertical circular cylinder at points external to it 196-226
See also Stefănescu, S. S.
Naboko, S. I. Recent hydrothermal processes 202-323
—— The formation of recent hot springs and the metamorphism of solutions and rocks 202-347
See also Gorshkov, G. S., and Vlodavets, V. I.
Nafe, J. E. See Kuo, J. T.
Nag, K. R. Generation of Rayleigh waves due to stress-discontinuity in a semi-infinite elastic medium 196-157
—— "SH" type of motion due to moving sources in a semi-infinite elastic medium 194-96
Nagai, Kozo. The drowned sea caves on the southwestern coast of Ehime Prefecture 193-182

Abstract

Nagai, M., Sano, Y., and Hakura, Y. On the relation between magnetic storm and ionospheric disturbances on Sept. 13th 1957 ---------- 195-262

Nagai, M., Sano, Y., and Yanagihara, Kazuo. Some analyses of Dst and DS fields of magnetic storm during the IGY (1) ---------- 195-263

See also Sano, Y.

Nagaoka Weather Message Station. See Niigata L. M. O.

Nagata, Takesi. Morphology and some interpretation of geomagnetic variations in Antarctica ---------- 202-211

Nagata, Takesi, and Kobayashi, Kazuo. Thermo-chemical remanent magnetization of rocks ---------- 197-252

Nagata, Takesi, and Kokubun, Susumu. An additional geomagnetic daily variation field (Sq^P field) in the polar region on geomagnetically quiet day ---------- 200-264

Nagata, Takesi; Kokobun, Susumu; and Iijima, T. Geomagnetically conjugate relationships of giant pulsations at Syowa Base, Antarctica, and Reykjavík, Iceland ---------- 202-210

Nagata, Takesi, and Oguti, Takasi. Magnetic charts for the epoch of 1958.5 corrected for the Antarctic region and spherical harmonic coefficients of the revised geomagnetic field ---------- 200-256

Nagata, Takesi; Oguti, Takasi; and Muraishi, Yukihiko. Report on geomagnetic observation at Syowa Base, 1960 ---------- 195-249, 200-257

Nagata, Takesi, and Rikitake, Tsuneji. Geomagnetic secular variation and poloidal magnetic fields produced by convectional motions in the Earth's core ---------- 194-252

See also Yama-ai, Mituko, and Syono, Yasuhiko.

Nagumo, Shozaburo. On the elastic property of granular media (I) -- 199-78

—— On the elastic property of granular media (II) ---------- 202-85

Nagy, Bartholomew; Meinschein, W. G.; and Hennessy, D. J. Mass spectroscopic analysis of the Orgueil meteorite: evidence for biogenic hydrocarbons ---------- 196-44

Nairn, A. E. M. Palaeomagnetic measurements on the Great Dyke, Southern Rhodesia ---------- 198-260

Nairn, A. E. M., and Runcorn, S. K. Paleoclimates ---------- 200-284

See also Magnée, Ivan de.

Nakagawa, Ichiro. See Takeuchi, Hitoshi.

Nakai, Nobuyuki. See Dessau, G. J.

Nakamura, Hisayoshi. On the occurrence of geothermal products in Japan ---------- 203-225

Nakamura, Hisayoshi; Maéda, Kenjirō; and Suzuki, Takashi. Geothermal structure in the Awara hotspring area, Fukui Prefecture ---------- 198-191

Nakamura, Hisayoshi; Suzuki, Takashi; and Maéda, Kenjirō. Geology and thermal waters of Gojōjiki hotspring area, Fukushima Prefecture ---------- 193-363

Nakamura, Kazuaki. See Sugimura, Arata.

Nakano, Takamasa; Ohya, Masahiko; and Takehisa, Yoshihiko. Relation between tsunami and coastal landforms in case of the Chilian earthquake tsunami, May 24th, 1960 ---------- 194-82

Nakasi, Noboyuki. See Deevey, E. S., Jr.

Nakhamkin, S. A. Elements of the theory of interference reception of regular waves fixed by random functions ---------- 197-114

Nalivayko, V. I., Tyurmin, A. V., and Fastovskiy, U. V. PM-5 proton field magnetometer ---------- 203-263

Namikawa, Tomikazu. On the self-exciting dynamo theory of the Earth's main magnetic field ---------- 197-236

—— The occurrence of over-stability of a layer of fluid heated below and subject to the simultaneous action of magnetic field and rotation ---------- 197-223

Napalkov, Yu. V. See Ryabinkin, L. A.

Abstract
Narayana Rao, V. An instrument for measuring small changes in the velocity of sound in the sea -------- 196-165
Nash, D. B. On the distribution of lunar maria and the synchronous rotation of the Moon -------- 197-56
Nash, D. M., Jr. See Peacock, R. B.
Nason, R. D., and Lee, W. H. K. Preliminary heat-flow profile across the Atlantic -------- 195-205
Natof, N. W. See Anderson, L. A.
Nature. International Geophysical Calendar 1963 -------- 195-131
Naudy, H. Contribution of bilogarithmic master curves to gravimetric interpretation -------- 195-189
Naughton, J. J. Possible use of argon-39 in the potassium-argon method of age determination -------- 199-5
Naydenova, N. Ya. See Mishin, V. M.
Nayudu, Y. R. A new hypothesis for origin of guyots and seamount terraces -------- 202-305
Nazarnyy, S. A. On the use of the seismic method in engineering-geologic investigations -------- 196-337
Nazarov, A. G. Some problems of scientific research work in engineering seismology -------- 203-87
Nazarov, I. M. See Balyasnyy, N. D., and Boltneva, L. I.
Nazarova, T. N. Investigation of meteor dust by means of rockets and artificial satellites -------- 193-40, 196-51
—— Investigation of meteoric particles on the third Soviet artifical Earth satellite -------- 192-29
—— Results of investigation of meteoric matter by means of instruments installed on cosmic rockets -------- 192-28
—— Rocket and satellite studies of meteoric dust -------- 201-40
—— The results of studies of meteoric dust by means of Sputnik III and space rockets -------- 193-44
Nechayeva, G. I. See Ogil'vi, A. A.
Nedyalkov, I. P., and Byrnev, P. Kh. Analytical continuation of gravity anomalies -------- 203-200
Néel, Louis. Magnetic properties of fine-grained antiferromagnetics: Superparamagnetism and superantiferromagnetism -------- 197-256
Neff, C. H. See Sass, L. C.
Negi, J. G. Reply by author to discussion by Ari Ben-Menahem and Armando Cisternas -------- 203-151
Neidell, N. S. A statistical study of isostasy -------- 202-148
See also Sutton, G. H.
Neilon, J. R. See Cain, J. C.
Neizler, S. M. See Rogachev, B. V.
Nekhoroshev, A. S. On the problem of the basis of a procedure for determining the pressure of volcanic steam at depth -------- 202-168
Nekrasov, I. A., and Raudonis, P. A. Meteorite craters -------- 200-60
Nekrasov, Yu. Ye. On the construction of ray diagrams in the case of an arbitrary law of variation of seismic velocity with depth -------- 197-329
Nekrasova, K. A. See Litvinenko, I. V.
Nelson, J. H., Hurwitz, Louis, and Knapp, D. G. Magnetism of the Earth -------- 201-244
Nemtsov, L. D. On the methodology of high-precision gravimetric investigations in the prospecting of oil and gas deposits -------- 198-175
—— On the problem of the possibilities of high-accuracy gravity surveying in prospecting for petroleum deposits -------- 200-206
See also Yegorov, A. P.
Nemtsova, E. I. See Mishin, V. M.
Nenashev, N. I. New data on the age of the igneous rocks of the western part of the Verkhoyan-Kolyma folded region -------- 192-11
Nepesov, K. See Dubrovskiy, V. G.
Nenilina, V. S. See Bagdasarova, A. M.

Abstract

Neprochnov, Yu. P. New data on crustal structure under the bottom of the Indian Ocean — 195-216

—— Results of deep seismic sounding on the Black Sea — 194-349

Neprochnov, Yu. P., and Lunarskiy, G. N. Use of seismo-acoustic radio buoys for study of the structure of the Earth's crust in the Indian Ocean — 199-328

See also Lunarskiy, G. N.

Nersesov, I. L. See Bagdasarova, A. M., Gurevich, G. I., and Krestnikov, V. N.

Ness, N. F. See Harrison, J. C., and Heppner, J. P.

Nesse, Trygve. A study of microseisms in Bergen during the I. G. Y — 192-311

Nettleton, L. L. Gravity and magnetics for geologists and seismologists — 192-211

Nettleton, L. L., and Cannon, J. R. Investigation of upward continuation systems — 194-201

—— Reply by authors to discussion by Amalendu Roy — 203-193

Nettleton, L. L., LaCoste, L. J. B., and Glicken, Milton. Quantitative evaluation of precision of airborne gravity meter — 192-218

Neuman, Martha. See Zmuda, A. J.

Neumann, Frank. New analytical methods reveal the pattern of seismic activity in western Washington — 197-73

Neumann van Padang, M. The temperatures in the crater region of some Indonesian volcanoes before the eruption — 203-355

Nevel, D. E. The narrow free infinite wedge on an elastic foundation — 192-352

Newell, H. E. Space in geophysics — 193-162

Newell, N. D. Geology's time clock — 195-4

Newman, J. K. Instrumentation for airborne geophysical surveys with DC-3 aircraft — 192-303

Neyshtadt, M. I. Devirts, A. L., Markova, N. G., Dobkina, E. I., and Khotinskiy, N. A. Dating of Holocene deposits by the radiocarbon and pollen analysis data — 196-23

Neyshtadt, N. M. See Mazanova, Z. V.

Nichiporuk, V. A. See Komarov, S. G., and Petrosyan, L. G.

Nichiporuk, Walter, and Brown, Harrison. Platinum and iridium abundances in meteorites — 194-33

Nicholls, H. R. Discussion on "Recent techniques for determination of in situ elastic properties and measurement of motion amplification in layered media," by R. J. Swain — 200-118

Nicholson, S. B., and Wulf, O. R. The diurnal variation of K indices of geomagnetic activity on disturbed days in 1949-1957 — 193-269

Nicolaysen, L. O. Stratigraphic interpretation of age measurements in southern Africa — 197-18

See also Clifford, T. N.

Nicolet, Marcel. See Kockarts, G.

Nielsen, Heims. See Buschendorf, F., and Gehlen, Kurt von.

Nier, A. O. C. See Signer, Peter.

Niewiarowski, J., and Wyrzykowski, T. Determination of vertical movements of the Earth's crust over the extent of Poland by the method of precision levelings — 194-190

Niggli, Ernst. See Ferrara, Giorgio.

Niigata L. M. O., and Nagaoka Weather Message Station. The Nagoika earthquake of Feb. 2, 1961 — 192-52

Niino, Hiroshi. See Emery, K. O.

Nikiforov, B. S. See Sollogub, V. B.

Nikitenko, K. I. See Anishchenko, G. N., and Berdichevskiy, M. N.

Nikitin, O. T. See Petrov, V. S.

Nikitin, V. I. Determination of the thickness of the zone of surface weathering on hard rock by means of field seismic surveying — 200-322

Abstract

Nikitin, V. N. Method and results of determination of the elastic properties of limestones under conditions of natural occurrence by seismic and ultrasonic methods 194-113
—— Nomograms for determining values as functions of three variables, one of which is related to the linear dependence function 199-323
—— On the relationships between the dynamic and static moduli of elasticity of rocks 200-115
Nikitin, V. N., and Savich, A. I. Determination of the velocity of transverse waves from a single traveltime curve of converted head waves of PSP type 199-317
Nikitina, I. S. Tectonic structure of the northern part of the central Russian basin according to gravity survey data 198-185
Nikitina, N. M. Preliminary results of Earth current observations at the Barentsburg station (Spitsbergen) 195-43
See also Zubareva, E. P.
Nikitina, V. N. Some calculations of electromagnetic fields for the method of radioscopy 202-94
Nikolayev, D. S., and Yefimova, Ye. I. On the problem of determining the age of the iron-manganese concretions of the Indian and Pacific Oceans 203-18
Nikolayev, N. I. Fundamental features of the recent tectonics of the USSR 195-178
—— Mechanism of formation of folds and faults developing in very recent time, exemplified by the Karatau (southern Kazakhstan) 196-219
—— Neotectonics and some results of studying it in the USSR 195-151
—— Practical use of the map of recent tectonics of the USSR on a scale of 1:5, 000, 000 195-153
—— Recent tectonics of the Karatau Range (southern Kazakhstan) 195-169
—— The neotectonics of Eurasia 195-179
Nikolayev, N. I., and Shul'ts, S. S. Outline map of the recent tectonics of the USSR and the principles of its compilation 195-152
Nikolayev, V. A., and Provodnikov, I. Ya. Recent tectonics of the West-Siberian Lowland 195-164
Nikolayevskiy, A. A., and Tyurin, M. N. Information on the tectonic regionalization of the Uchalin region according to geophysical data 202-107
Nikol'skiy, A. P. Diurnal variation of the magnetic disturbance at the geomagnetic pole in the Antarctic 201-260
—— Experimental proof of the existence of a second zone of magnetic disturbance in the east Arctic 201-263
—— Geomagnetic time as a controlling factor in the development of magnetic disturbances 201-262
—— On the problem of the geographic distribution of the irregular magnetic disturbances in high latitudes 195-253
Nikol'skiy, E. V. See Voronin, Yu. A.
Nikonov, V. F. See Boyarskikh, G. K.
Nilsson, Erik. See Lundqvist, Gösta.
Nininger, H. H. Meteorite with unique features 196-38
Nishida, Atsuhiro, and Jacobs, J. A. Equatorial enhancement of world-wide changes 193-270
Nishimura, Eiichi. On the continuous observation of crustal deformation 195-57
Nishimura, Susumu. The relationships between the petrology and the radioactivity of some granitic bodies (1) 200-307
Nishimura, Takeshi. See Katsui. Yoshio.
Nodia, M. S. Some remarks on the German translation of Gauss' treatise "Intensitas vis magneticae terrestris ad mensuram absolutam revocata" 195-237
Noetzlin, Jacques. Isotopic composition of sulfurs of volcanic origin 194-233

Abstract

Noguchi, Kimio, and Kamiya, Hiroshi. Prediction of volcanic eruption by measuring the chemical composition and amounts of gases ---- 203-347

Nomokonov, V. P. On the "plane front" method ---- 198-320

Norden, J. A. E. Thickness of the Earth's crust below nuclear test site GNOME, southeastern New Mexico ---- 202-175

Norden, J. A. E., and King, J. E. Geophysical detection of faulting, South Sparks area, Lincoln County, Oklahoma ---- 193-153

Norden, J. A. E., King, J. E., and McDaniel, G. O., Jr. Geophysical delineation of fault zones, South Norman area, Cleveland County, Oklahoma ---- 193-154

Norden, J. A. E., and Mankin, C. J. Variation of magnetic susceptibility in the Blaine formation (Permian), northern Blaine County, Oklahoma ---- 197-266

Norinelli, Armando. A new station for the study of the earth tide ---- 193-101

—— Contribution to the study of the Earth's gravitational tide ---- 193-100

—— Determination of the instrumental constants of the Eötvös-Schweydar torsion balance, L. 40, no. 150, large model ---- 193-213

—— First results on the geophysical prospecting of the buried channel of the Rienza in the Sciaves di Bressanone area (Alto Adige) ---- 193-156

—— On the determination of the torsion coefficient of the Eötvös balance. New procedure ---- 193-212

—— Significance of Cassinis' numbers as weights in the calotte correction of gravity measurements ---- 193-193

Norinelli, Armando, and Bernardi, A. Distribution of the buried eruptive masses in the area of Monte Lozzo (Euganean Hills) ---- 193-299

Norinelli, Armando, and Tesi, F. Results of recordings of the Earth's gravitational tide at the Padua and Trieste (Grotta Gigante) stations ---- 193-99

Norinelli, Armando, and Zambrano, R. Measurements of gravity for the geophysical prospecting of a buried river bed ---- 192-212

Northrop, J. W., III, and Meyerhoff, A. A. Validity of polar and continental movement hypotheses based on paleomagnetic studies ---- 200-281

Northrop, John. Geophysical observations on Christmas Island ---- 195-126

Northrop, John, and Raitt, R. W. Seaquakes in the Flores Sea ---- 198-61

Northrop, John, and Ransone, Morris. Some seismic profiles near the western end of the Puerto Rico Trench ---- 192-337

See also Johnson, R. H.

Northwood, E. J. Geophysical case history--Black Hollow Field, Weld County, Colorado ---- 196-193

Nosske, Gerhard. Practical experiences with IP measurements with short d-c impulses ---- 192-122

Novikov, A. S. See Yevdokimov, G. S.

Novysh, V. V. See Finger, D. L., and Kovalevskiy, I. V.

Nudel'man, A. V. The Soviet expeditions in the Antarctic, 1959-61 ---- 198-142

Nuttli, Otto, and McEvilly, T. V. The response characteristics of the long period seismographs of the Saint Louis University network ---- 197-102

Nye, J. F. On the theory of the advance and retreat of glaciers ---- 201-191

—— The response of glaciers and ice-sheets to seasonal and climatic changes ---- 201-192

O

Oakley, K. P. Dating skeletal material ---- 200-9

Oba, Yoshio. See Katsui, Yoshio.

Obihiro Weather Station. See Sapporo, D. M. O.

Oblogina, T. I. On relative intensity of diffracted and head waves related to thin layers ---- 194-98

Abstract

Oblogina, T. U., Piyp, V. B., and Kochiay, S. Use of seismic methods for study of intrusives --- 192-332

O'Brien, J. K. See Handin, John.

O'Brien, P. N. S. A note on the reflection of seismic pulses with application to second event refraction shooting --- 198-315

Observatorio Magnetico de Teoloyucan. Magnetic values for the year of 1962 --- 203-267

Obukhov, G. G. Magnetotelluric field in an inhomogeneous medium- 199-52

—— The effect of periodic irregularities in the relief on the dispersion curves of surface seismic waves --- 202-66

—— The problem of the magnetotelluric field in an inhomogeneous medium --- 201-63

Ochkur, A. P., Sokolov, M. M., Bol'shakov, A. Yu., and Khitev, P. P. On the possibility of determining the nature of the anomalies of selective logging (SK) --- 197-325

See also Sokolov, M. M.

Oda, Uteana. See Brokaw, A. L.

Odani, Yoshitaka, and Saitō, Tomosaburō. Geophysical investigation at Fumuro Mine, Fukui Prefecture --- 194-145

Odé, Helmer. Faulting as a velocity discontinuity in plastic deformation --- 195-338

Odinokov, V. P. See Bespalov, D. F.

Odintsov, M. M. Some problems of the tectonic development of platforms --- 193-178

Oelsner, Christian. Results of gravity measurements in the eastern Erzgebirge --- 203-210

See also Grosse, Siegfried.

Oeschger, Hans. See Geiss, Johannes, and Gfeller, Chr.

Off, Theodore. See Paschall, R. H.

Offshore. Phase II of Mohole Project underway --- 194-175

Ogbuehi, P. O., and Onwumechilli, C. A. Recent measurements of the magnetic field of the equatorial electrojet in Nigeria --- 199-223

See also Onwumechilli, C. A.

Ogden, J. G., III. The Squibnocket Cliff peat: radiocarbon dates and pollen stratigraphy --- 200-10

Ogil'vi, A. A. Study of the conditions of flooding of deposits in karst regions of the Urals by means of geophysical methods --- 195-123

Ogil'vi, A. A., Matveyev, B. K., and Shkabarnya, N. G. Electrical exploration of a Kungur karst cave --- 194-142

Ogil'vi, A. A., and Nechayeva, G. I. Resistivity observations as a method of study of dynamic zoning of fractured-karst ground water --- 196-188

Ogilvie, R. E. See Agrell, S. O., and Goldstein, J. I.

Ogorodnik, I. P., Yevtushenko, Ye. I., and Chuprunova, O. V. Latitude variations at Poltava from observations with the Zeiss zenith telescope in the period 1956.6-1957.5 --- 203-126

Oguti, Takasi. See Nagata, Takesi.

Ohya, Masahiko. See Nakano, Takamasa.

Oil in Canada. Geophysical work has 1.5 percent gain --- 195-119

Oilweek. Australia 1963 --- 200-167

—— Earth's core to outer space is wide range of technical papers -- 192-166

—— Geophysicists wonder when will upsurge hit --- 192-167

—— Government lets contract for deep coring program in Arctic --- 197-221

—— New method to find deep prospects in old areas --- 193-191

Okada, Atusi. Land deformation accompanying with Nagaoka earthquake, Feb. 2d, 1961 --- 195-53

—— Some investigations on the character of crustal deformation---- 196-214

Okada, Atusi, and Izutuya, Sadakatu. Land deformation of the Northern Miyagi earthquake on April 30th, 1962 --- 196-111

Abstract

Okamoto, Natsuo. Researches on the hot spring group in Arima --- 202-169

O'Keefe, J. A. Determination of the Earth's gravitational field ---- 193-183

—— The origin of the tektites ---------- 193-47

O'Keefe, J. A., and Cameron, W. S. Evidence from the Moon's surface features for the production of lunar granites ---------- 195-30

O'Keefe, J. A., and Lowman, P. D., Jr. New investigations of the Igast "meteorite" ---------- 192-26

O'Keefe, J. A., and Shute, B. E. Origin of tektites ---------- 198-32

—— Tektites and natural satellites of the Earth ---------- 192-34

Okhatsimskaya, M. V., Rastrusin, Yu. B., and Rokityanskiy, I. I. Regularities in excitation of short-period oscillations in middle latitudes ---------- 195-40

Okura, Takeshi. See Kayama, Izao.

Olczak, Tadeusz. Seismology in Poland, 1958-1960 ---------- 198-85

Olberg, Manfred. Realtionships between the curvatures of equipotential surfaces in the form of substitute relation ---------- 201-160

Olehy, D. A. See Schmitt, R. A.

Oliver, J. E. Additional evidence relating to "A worldwide storm of microseisms with periods of about 27 seconds" ---------- 199-275

Oliver, J. E., and Page, Robert. Concurrent storms of long and ultralong period microseisms ---------- 195-307

See also Brune, J. N.

Oliveri, Enrico. Relativistic equation of motion of the variable mass ---------- 201-159

Olivero, Sergio. First data on the temperature of the underground in the Mont Blanc Tunnel ---------- 199-185

Olsson, I. U., and Blake, Weston, Jr. Problems of radiocarbon dating of raised beaches, based on experience in Spitsbergen ---- 199-20

Olsson, I. U., Karlen, Ingvar, Turnbull, A. H., and Prosser, N. J. D. A determination of the half-life of C-14 with a proportional counter ---------- 193-9

Onasch, H.-J. On the construction of reflections by means of wave front diagrams, taking into consideration reflecting markers ---------- 194-306

Oncley, L. A. See Daneš, Z. F.

Onda, Isao. Studies of the Northern Miyagi earthquake on April 30th, 1962 - Compared with the Northern Rikuzen earthquake on May 12th, 1900 ---------- 196-109

See also Yoshiyama, Ryoichi.

Ondoh, Tadanori. Variations of the Earth's exosphere and geomagnetic disturbances during the geomagnetic storm of 4 September 1958 ---------- 193-284

See also Maeda, Hiroshi.

Onin, N. M. The use of electrical logging methods in surveying the Gul'shad polymetallic deposits in central Kazakhstan ---------- 198-124

Ono, Hironori, and Machida, Tadao. Application of radioisotopes to the measurement of void ratio of the foundation ---------- 198-304

Onodera, Seibe. A contribution to the theory of a multiple-layer resistivity problem ---------- 192-125

—— Numerical analysis of relative resistivity for a horizontally layered earth ---------- 199-86

Onoé, Toru. See Bojo, Toshiatsu.

Onwumechilli, C. A. Lunar effect on the diurnal variation of the geomagnetic horizontal field near the magnetic equator ---------- 199-227

Onwumechilli, C. A., and Ogbuehi, P. O. Fluctuations in the geomagnetic horizontal field ---------- 193-271

See also Ogbuehi, P. O.

Opdyke, N. D. See Gough, D. L.

Öpik, E. J. Jupiter: chemical composition, structure, and origin of a giant planet ---------- 197-62

Abstract
Öpik, E. J. Notes on the theory of impact craters ---------- 194-57
—— Selective escape of gases ---------- 201-28
—— The lunar atmosphere ---------- 193-58
Orcel, Jean. See Jérémine, Elisabeth.
Orellana Silva, Ernesto. Geophysics and selenography ---------- 192-39
—— Properties and drawing of the so-called Dar Zarrouk curves ---------- 200-125
Orkisz, Henryk. The calculation of the geomagnetic vertical intensity in the underground and its relationship to the geological underground ---------- 195-294
Orlov, A. N. See Idenbom, V. L.
Orlov, D. P. See Cherdyntsev, V. V.
Orlov, G. G. Determination of the direction of magnetization of bodies of spherical shape according to the anomaly values of the Z- or H-components of the magnetic field ---------- 201-290
—— Interpretation of aeromagnetic anomalies in the case of oblique magnetization ---------- 201-292
—— On the problem of the determination of the parameters of geologic bodies according to geophysical data obtained at different distances from the disturbing object ---------- 201-291
—— On the problem of the determination of the restriction of sheet deposits at depth ---------- 201-289
Orlov, L. I., and Gimayev, R. S. The effect of overburden pressure on the electrical resistivity of carbonate rocks ---------- 200-138
Orlov, L. I., and Malinin, V. F. Laboratory method of studying the structure of the pore space of carbonate rocks ---------- 199-112
Orlov, V. P. Secular variation of the geomagnetic field and methods of using it in compiling small-scale magnetic charts ---------- 198-232
See also Adam, N. V.
Orlova, N. I. See Shishkin, P. T.
Orlova, Ye. M. On the accuracy of calculation of the effect of distant zones on the elevation of the quasi-geoid by expanding Stokes' function in series of the K and Q coefficients ---------- 196-207
Ormrod, J. H. See Barker, R. C.
Orovetskiy, Yu. P. See Lebedev, T. S.
Orowan, E. Mechanism of seismic faulting ---------- 195-59
Ortner, Johannes, Egeland, Alv, and Hultqvist, Bengt. The great earth storms of November 1960 as observed at Kiruna Geophysical Observatory ---------- 193-286
Ortner, Johannes, Hultqvist, Bengt, Brown, R. R., Hartz, T. R., Holt, O., Landmark, B., Hook, J. L., and Leinbach, H. Cosmic noise adsorption accompanying geomagnetic storm sudden commencements ---------- 192-284
See also Keppler, E.
Osborne, D. G. Daily variability in strength of the equatorial electrojet ---------- 199-224
Osborne, D. G., and Skinner, N. J. Equatorial drift and the electrojet ---------- 199-225
Oshima, H. An attempt to give an index to the activity of pc-type pulsations and its applications to the analysis of geomagnetic storms ---------- 195-261
See also Kawamura, M.
Osipov, I. O. Love waves in an anisotropic layer of monoclinic symmetry ---------- 203-132
—— Method of functionally invariant solutions for problems in dynamic theory of elasticity of anisotropic mediums ---------- 201-105
—— Waves of the Rayleigh type at the interface of two mediums of cubic anisotropy ---------- 192-111
See also Mazanova, Z. V.
Osipov, N. K. Computer synthesis of geomagnetic data ---------- 198-227
Osipova, B. A. See Mamedov, Sh. N.

Abstract

Osokina, D. N. Optically active plastic materials for modeling tectonic processes and methods of investigating the mechanical and optical properties of these materials ---------- 196-221
Ossaka, Joyo. See Kayama, Izao.
Ostenso, N. A. Aeromagnetic survey of the Arctic Ocean basin---- 203-299
—— Geophysical investigations of the Arctic Ocean basin ---------- 195-342
—— Physiography and structure of the Arctic Ocean basin ---------- 201-227
—— Physiography of the Arctic Ocean basin ---------- 203-329
Osterberg, Charles, Kulm, L. D., and Byrne, J. V. Gamma emitters in marine sediments near the Columbia River ---------- 198-289
Östlund, H. G., and Engstrand, L. G. Stockholm natural radiocarbon measurements V: Radiocarbon ---------- 203-32
See also Rusnak, G. A.
Ostrovskiy, A. Ye., Bakhryshin, A. B., and Mironova, L. I. Tidal tilts of the Earth according to observations in Kondara in 1958- 201-94
Ostrovskiy, A. Ye., Ionychev, N. N., and Fandyumina, S. M. Tidal tilts of the Earth according to observations in Ashkhabad in 1957-58---------- 201-95
Ostrovskiy, A. Ye., Khromskiy, A. V., and Mironova, L. I. Results of observations of tidal tilts of the Earth at Kounrad in 1957---------- 195-84
Ostrovskiy, A. Ye., Matveyev, P. S., and Fandyumina, S. M. Observations of tidal tilts of the Earth at Poltava in 1958 ---------- 201-96
Ostrovskiy, Yu. A. See Yepinat'yeva, A. M.
Ostryy, G. B. Method of correlation of borehole sections encountering permafrost by means of gamma logging ---------- 198-311
Otaki, Takemichi. Electrical prospecting of Nissho Mine, Fukushima Prefecture ---------- 192-139
Otsuka, Michio. On the forms of the S and ScS waves of some deep earthquakes ---------- 201-230
Otte, Carel. See Slack, H. A.
Ovanesov, G. P. Procedure of surveying the large scale oil fields and pools of Bashkiria---------- 200-162
Ovchinnikov, A. K., See Kolesov, B. M.
Ovchinnikova, G. V., See Gerling, E. K.
Overseas Geological Surveys. Geophysical field surveys -- Primary gravity net in East Africa, Northern Rhodesia and Nyasaland 1959-61 ---------- 192-222
Ozawa, Izuo. On the combined observations of the crustal deformations at some observatories inside a small area (at Osakayama) ---------- 201-179
Ozawa, Takejiro. See Iwasaki, Iwaji.
Ozerskoy, M. L. See Dortman, N. B.
Ozima, Minoru. See Sawada, M., and Yama-ai, Mituko.

P

Paffengol'ts, K. N. Volcanic cycles of the Caucasus ---------- 202-128
Page, E. E. See Dempsey, W. J., and Johnson, R. W., Jr.
Page, J. R. See Henderson, J. R., Jr.
Page, Robert. See Oliver, J. E.
Pâguet, Paul. See Melchior, P. J.
Paicu, Dumitru, and Constantinescu, P. Seismic-reflection prospecting in the Cristur region ---------- 201-344
Paicu, Dumitru, and Păsat, Teodor. Regional seismic prospecting in the Tecucu region ---------- 201-346
Pak, V. A. Use of seismic surveying for study of the geology of the southeast part of the Fergana valley ---------- 198-342
Pakh, E. M. Procedure for sampling and studying the quality of coals in geological exploratory operations in the Kuznets basin -- 200-145

Abstract

Pakiser, L. C. See LeFehr, T. R., and Steward, S. W.
Palm, Ann, and Storm, R. G. The craters in the lunar walled plain Ptolemaeus ---------- 202-47
Palmason, G. See Bődvarsson, Gunnar.
Panasenko, G. D. Structure of the Earth's crust in the Kola Peninsula according to seismic data ---------- 195-214
Panasenko, V. N., and Muromtseva, Z. G. Some results of gravimetric observations in mines in the Krivoy Rog iron ore basin--- 203-212
Panasyuk, I. S. On the determination of the age of the elements and duration of their formation ---------- 196-42
Panchenko, N. I., and Slavinskaya, A. A. Observations of latitude variations at Poltava by means of the Danjon prismatic astrolabe- 203-121
Pankratov, A. K. See Dvoryashin, A. S.
Panov, D. G. Morphology of the floor of the world's oceans ------- 200-353
—— Origin of continents and oceans ---------- 193-173
Panov, T. N. The magnetic storm of July 15, 1959 ---------- 201-270
Papadopulos, Emanuel. See Proctor, C. M.
Parasnis, D. S. Principles of applied geophysics ---------- 197-165
—— Reply [to discussion on paper "Exact expressions for the gravitational attraction of a circular lamina at all points of space and of a right circular vertical cylinder at points external to it"] ---- 195-190
—— The vertical field anomaly of a linear magnetic dipole ---------- 195-293
Paria, G. On magneto-thermo-elastic plane waves ---------- 192-113
Pariyskiy, N. N. Correction for vertical accelerations in observations of tidal gravity variations ---------- 195-83
—— Earth tides and the internal structure of the Earth ---------- 201-88
—— On the detection of a diurnal nutation of the Earth ---------- 203-119
—— On the influence of earth tides on the secular retardation of rotation of the Earth ---------- 196-135
Pariyskiy, N. N., Dobrokhotov, Yu. S., Pertsev, B. P., Kramer, M. V., Belikov, B. D., and Barsenkov, S. N. Observations of tidal variations of gravity in Krasnaya Pakhra ---------- 201-93
Pariyskiy, N. N., Pertsev, B. P., Gridnev, D. G., Kramer, M. V., and Barsenkov, S. N. Tidal variations of gravity at Alma Ata ---------- 195-81
Park, F. R. See Massalski, T. B.
Parkin, B. R. See Brode, H. L.
Parkin, D. W., and Hunter, W. Meteorites and cosmic dust ------ 194-46
Parkinson, W. D., and Curedale, R. G. Isomagnetic maps of eastern New Guinea for the epoch 1957.5 ---------- 198-230
Parry, L. G. See Irving, E., and Lovering, J. F.
Parwell, A. See Wickman, F. E.
Păsat, Teodor. See Paicu, Dumitru.
Paschall, R. H., and Off, Theordore. Dip-slip versus strike-slip movement on San Gabriel fault, Southern California ---------- 192-199
Pasechnik, I. P. Relation of seismic magnitude to the seismogeologic characteristics of the region of observation---------- 196-169
—— Science proves: Nuclear explosions can be detected regardless of where they take place ---------- 192-118
See also Kogan, S. D.
Pashutina, S. R., Petrova, V. V., Telyakova, Z. Kh., and Tuyezov, I. K. Deep seismic investigations in western Siberia ------ 194-346
Paslay, P. R., and Cheatham, J. B., Jr. Rock stresses induced by flow of fluids into boreholes ---------- 198-348
Patalakha, Ye. I. Analysis of uniform plastic deformation in relation to study of the internal tectonic deformation of rocks ------- 201-356
Paterson, M. S. Secondary changes to length with pressure in experimentally deformed rocks---------- 195-339
See also Griggs, D. T.
Paterson, W. S. B., and Savage, J. C. Geometry and movement of the Athabasca glacier ---------- 202-142

Abstract

Paterson W. S. B., and Savage, J. C. Measurements on Athabasca glacier relating to the flow law of ice ------ 202-144

See also Savage, J. C.

Patten, E. P., Jr., and Bennett, G. D. Application of electrical and radioactive well logging to ground-water hydrology ------ 202-100

Patterson, C. C. See Chow, T. J.

Paul, M. K. Quantitative interpretation of three-dimensional finite mass distribution from gravity data ------ 192-210

Paul, P. C. Geophysical survey for exploration of pyrrhotite in the Thaniyar reserved forest area near Polur, North Arcot district, Madras ------ 195-113

Pauthenet, Réne. See Cohen, J.

Pavlogradskiy, V. A. See Volarovich, M. P.

Pavlov, N. N., and Staritsyn, G. V. On the variation of the rate of rotation of the Earth about the axis during the time of the IGY and IGC ------ 196-137

Pavlov, Yu. A. On the application of the method of tangents to the interpretation of Δg curves over a vertical step ------ 202-152

Pavlova, L. G. See Pyatetskiy-Shapiro, I. I.

Pavlova, M. See Yordanov, N.

Pavlovskiy, V. I. On the relationship of scale, accuracy of observation, and density of the network in gravimetric surveys ------ 198-172

Pavlovskiy, V. I., and Serebryakov, Ye. B. Nomogram for determining the shape, dimensions, and excess density of two-dimensional bodies of rectangular cross-section according to V_{zz} curves ------ 199-151

Pavlovskiy, V. I., and Shavoronkin, I. A. On the relationship of anomalies of weak intensity to rich iron deposits of the Kursk magnetic anomaly ------ 198-281

Payo Subiza, Gonzalo. Study of the surface waves Lg, Rg, and Li in the records of the Toledo observatory ------ 192-97

Peacock, R. B., and Nash, D. M., Jr. Thumping technique using full spread of geophones ------ 196-327

Peaslee, D. C. See Cleary, J. R.

Pěč, Karel. On the structure of the Kurile-Kamchatka region and some Arctic regions according to Lg-wave observations ------ 192-243

Pecherskiy, D. M. One of the causes of low remanent magnetization of igneous rocks ------ 193-288

Peebles, J., and Dicke, R. H. The temperature of meteorites and Dirac's cosmology and Mach's principle ------ 192-197

Pegum, D. M. A gravity survey from the Birdsville Track to Oodnadatta ------ 193-233

—— Gravity investigations in the Leigh Creek area ------ 193-232

Pekeris, C. L., Alterman, Z., and Abramovici, F. Propagation of an SH-torque pulse in a layered solid ------ 196-142

Pekeris, C. L., Alterman, Z., and Jarosch, H. Studies in terrestrial spectroscopy ------ 200-97

Pelletier, B. R. Submarine goelogy program, Polar Continental Shelf project, Isachsen, District of Franklin ------ 197-350

Pelletier, Henri, Delibrias, Georgette, Labeyrie, Jacques, and Perquis, M. T. Measurement of the age of the volcanic flow of the Puy de la Vache (Auvergne) by the carbon-14 method ------ 198-15

Pellinen, L. P. Accounting for topography in the calculation of quasigeoidal heights and plumb-line deflections from gravity anomalies ------ 192-198

—— The effect of topographic masses on the deduction of the characteristics of the Earth's gravitational field ------ 196-229

Pellinen, L. P., and Govorova, L. A. An estimate of the accuracy of astronomic-gravimetric levelling in the USSR ------ 196-209

Pelyushenko, V. M., and Baklanov, N. I. Some results of geophysical investigations in the search for corundum in the area near the Azov Sea ------ 198-283

Abstract

Pemberton, R. H. Airborne electromagnetics in review 195-106

— Target "Mattagami" 192-133

Penning, J. R., Jr. See Proctor, C. M.

Pennington, Dale. Accelerometer resonant frequency 195-69

Penta, Francesco, and Bartolucci, Giorgio. On the state of "research" and of the industrial use (thermoelectric) of underground water vapor in various countries of the world 198-189

Penttilä, Esko. Report on the 1960 and 1961 explosion seismic investigations of the Earth's crust in Finland 202-176

Pepushoy, K. Spherical analysis of the geomagnetic field for the epoch 1955 203-251

Perel, Joseph, and Schieber, Michael. Magnetic moments of some mixed rare earth iron garnets 196-289

Pericoli, A. See Gantar, C.

Perkov, N. A. Investigations of salt profiles by means of geophysical well logging 192-142

See also Komarov, S. G.

Permyakov, V. V., and Savchenko, N. A. On the relationship between determinations of absolute and relative age of the shales of the central Caucasus 201-20

Peronaci, Francesco. Contribution to the knowledge of the seismic characteristics of northern Iran 192-50

See also Di Filippo, Domenico.

Perquis, M.-T. See Delibrias, Georgette, and Pelletier, Henri.

Perrin, René. On the mechanism of the diffusion of substances within the Earth's crust 199-137

Perry, D. See Daughtry, A. C.

Perry-Whittingham, A. See Caner, B.

Pertsev, B. P. An experiment in determination of scale recording coefficients during observations of tidal gravity variations 195-82

See also Dobrokhotov, Yu. S., and Pariyskiy, N. N.

Pervyshin, V. N. See Mikhaylovskiy, V. N.

Peselnick, Louis. Elastic constants of Solenhofen limestone and their dependence upon density and saturation 193-114

Peterschmitt, Elie, and Tazieff, Haroun. On a new type of volcanic shock recorded at Stromboli 193-362

Petersen, N. Investigations of magnetic properties of titanomagnetites in the Rauher Kulm basalt (Upper Palatinate) in connection with electron microscope observation 192-292

Petkevich, G. I. New possibilities of application of seismic velocities 193-329

— Regionalization of the Ciscarpathian downwarp according to the elastic properties of the rocks of the section 197-343

Petkevich, G. I., and Verbitskiy, T. Z. Estimation of the velocity of elastic waves in porous mediums saturated with liquid 193-117

Petkevich, G. I., Verbitskiy, T. Z., and Riznik, Ya. Ye. Velocity of propagation of elastic waves in formation fluids 193-116

Petkoff, I., and Elstner, C. Determination of the gravity difference between Potsdam and Sofia with pendulum apparatus 203-208

Petkov, I. N. See Demitrov, L.

Petrafeso, F. A. See Anderson, L. A., Andreasen, G. E., Dempsey, W. J., Frischknecht, F. C., and Johnson, R. W., Jr.

Petrikovskaya, M. Ye. See Grinberg, I. V.

Petrosyan, L. G. The recognition and appraisal of reservoirs in a carbonate section by means of geophysical borehole investigations 198-115

Petrosyan, L. G., and Bayramova, R. G. Modeling of lateral micrologging 199-106

Petrosyan, L. G., Kozina, Z. I., Guzanova, I. G., and Nichiporuk, V. A. On the problem of the procedures for determining the permeability of oil-bearing formations according to electrical logging data 200-141

Abstract
Petrov, L. V. On the classification of gravity prospecting works -- 194-211
Petrov, P. St., and Martinov, Sv. L. Some conclusions from recent hydrogeological investigations of the thermal springs of South Bulgaria -- 201-222
Petrov, V. S., and Nikitin, O. T. Investigations of the composition of the stable carbon isotopes in kimberlites -- 194-228
Petrova, G. N. See Burlatskaya, S. P., and Rybak, R. S.
Petrova, V. V. See Pashutina, S. R.
Petrović, J. N. See Damnhanović, Konstantin.
Petrović, Radomir. Contribution to the knowledge of velocities of elastic waves in the oil fields of Prekmurje and Slovenske Gorice -- 193-338
Petrovskiy, A. D., Rutshteyn, S. M., and Sviyazheninov, F. I. Attempt to apply the method of radiowave penetration in exploration for sulfide deposits -- 200-134
See also Semenov, A. S.
Petrushevskiy, B. A. Concerning the geologic circumstances of the Kansu earthquake of 1920 -- 194-72
—— Earthquakes and geologic structure of the northwest margin of the Pacific Ocean Basin -- 202-56
Peysikov, Yu. V. See Yermakov, V. I.
Peyton, H. R. Some mechanical properties of sea ice -- 202-300
Peyve, A. V., Strakhov, N. M., and Yanshin, A. L. Some important problems in the realm of theoretical geology -- 196-259
Pfotzer, G. See Keppler, E.
Pharr, R. F. See Le Van, D. C.
Philberth, Karl. A method of measuring temperatures in the interior of an ice cap -- 196-224
—— Remark on a thermal probe for measuring the temperature of layers of ice -- 195-183
Philibert, Josette. See Bonhomme, Michel.
Philip, J. R. The theory of heat flux meters -- 196-247
Philippot, J. Cl. New aspects of radioactivity measurements: Isochronic measurements and measurements of controlled duration - 202-255
Phinney, R. A., and Smith, S. W. Processing of seismic data from an automatic digital recorder -- 198-68
Picciotto, E. E., and Coppez, A. Bibliography of absolute age measurements in Antarctica -- 197-27
See also Gonfiantini, R.
Pícha, Jan, and Skalský, Lumír. A remark on earth tide observations -- 192-101
—— Determination of period of oscillation and sensitivity of simple horizontal pendulums for tidal measurements -- 200-107
Pichamuthu, C. S. Some observations on the structure, metamorphism, and geological evolution of Peninsular India -- 196-27
Pick, Miloš. Effect of the immediate vicinity of a gravity point on the value of the topographic correction -- 200-204
Pickell, J. J., and Heacock, J. G. Study of the density of rocks by the method of gamma-ray scattering -- 198-308
Pickett, G. R. The use of acoustic logging for evaluating the reservoir properties of sandstones -- 202-279
Picou, Claude, and Utzmann, René. The "vectorial seismic section"- semi-automatic registering -- 197-328
Piddington, J. H. A hydromagnetic theory of geomagnetic storms -- 196-284
—— An ionospheric drift theory of aurora and airglow -- 201-264
—— Connexions between geomagnetic and auroral activity and trapped ion -- 202-214
—— The cis-lunar magnetic field -- 200-246
Pieper, G. F., Zmuda, A. J., Bostrom, C. O., and O'Brien, B. J. Solar protons and magnetic storms in July 1961 -- 194-263
See also Zmuda, A. J.

Abstract

Pierce, A. P. See Cannon, R. S.
Pinasco, S. F. Aerial prospecting equipment for uranium -------- 203-310
Pinayeva, N. I. Metamorphism -------- 200-42
Pinson, W. H., Jr. See Bailey, S. W., Beall, G. H., Hower, J., and Hurley, P. M.
Pirson, S. J. Handbook of well log analysis for oil and gas formation evaluation -------- 198-112
Piruzyan, S. A. See Medvedev, S. V.
Pisani, M. See Allan, T. D., and Gantar, C.
Pis'mennyy, B. M. Results of a gravimetric survey on some deposits of the Angara-Ilin iron ore region -------- 195-202
Pitakpaivan, Kaset. See Barnes, V. E.
Piyp, B. I. See Vlodavets, V. I.
Piyp, V. B. See Oblogina, T. U.
Platonenkov, A. N. See Gvizd', D. I.
Plekhanov, G. F., Vasil'yev, N. V., Demin, D. V., Zhuravlev, V. K., Zenkin, G. M., Kovalevskiy, A. F., L'vov, Yu. A., Tul'skiy, A. S., and Fast, V. G. Some ways of studying the problem of the Tungus meteorite -------- 201-31
Pletnev, V. D., and Temnyy, V. V. Interaction of the solar corpuscular stream with the outer geomagnetic field in the first phase of a magnetic storm -------- 202-221
Pleva, S. Integrated interpretation of electrometry and radiometry of boreholes in prospecting for coal -------- 193-323
Plewa, Stanisław. See Kopia, Henryk.
Pliler, R., and Adams, J. A. S. The distribution of thorium, uranium, and potassium in the Mancos shale -------- 194-291
Plyusnin, M. I. On the choice of the fundamental parameters of induction logging apparatus -------- 198-120
Pochtarev, V. I. On the application of V. A. Kotel'nikov's theorem to the study of geophysical phenomena -------- 195-130
Pochtarev, V. I., and Vints, B. D. Experience in compiling charts of the "normal" magnetic field by a computation method -- 203-253
Pochtovik, V. S. See Gil'bershteyn, P. G.
Podoba, N. V., and Serova, A. D. Constitution and structure of the folded basement of the eastern part of the Russian platform -- 201-154
Pod"yapol'skiy, G. S. Reflection and refraction at the boundary of two elastic mediums in the case of a non-rigid contact -------- 202-88
Polak, L. S., Filippov, Ye. M., and Kuznetsov, G. A. Effect of concealed contacts and caverns on investigations by the method of diffused gamma radiation -------- 198-305
Poldervaart, Arie. Notes on the Vredefort Dome -------- 203-51
Poletayev, B. D., and Bosykh, Yu. A. The geological effectivness of gravity surveys in the Pechora coal basin and adjacent regions -------- 198-186
Polkanov, A. A. 25 years of some ideas and the research program of Academician Vladimir Ivanovich Vernadskiy on radiogeology -- 200-25
Pol'kin, Ya. I. See Kiryushina, M. G.
Pollack, Henry. See DeNoyer, John.
Polonskiy, A. M. Estimation of the reserves of iron deposits according to magnetic survey data -------- 201-299
Polshkov, M. K. Frequency-phase distortions in a bound system "electrodynamic seismograph installed on ground taking into account the input of the seismic amplifier" -------- 198-86
—— On the theory of distortions of seismic vibrations in the apparatus -------- 199-311
—— On the theory of the electrodynamic seismograph erected on the ground taking into account the input circuit of the seismic amplifier, 1 -------- 195-70
—— On the theory of the electrodynamic seismograph erected on the ground taking into account the input circuit of the seismic amplifier, 2 -------- 195-71

Abstract

Polshkov, M. K. On the theory of transient phenomena in an electrodynamic seismograph installed on the ground, taking into account the input of the seismic amplifier — 194-333

—— Problems of the theory and calculation of frequency distortions in a seismic recording channel — 201-341

Polshkov, M. K., and Kudymov, B. Ya. Status and means of increasing the effectiveness of geophysical methods of prospecting for mineral deposits — 198-325

Polyakov, A. K. Radiometric assaying in nonferrous metal mines — 200-308

Polyakov, A. S. Possibilities and means of increasing the effectiveness of geophysical exploration for ore deposits — 198-145

Polyakov, N. T., and Smirnov, L. Ye. Content of the natural radioisotope Be-7 in the atmosphere at an altitude of 9-10 kilometers — 195-226

Pomerantseva, I. V. On the problem of the structure and possible composition of the crystalline layer of the Earth's crust — 196-261

—— The nature of the waves attributed to the surface of the crystalline basement — 201-348

Pomerantseva, I. V., and Margot'yeva, M. V. On the problem of the nature of the waves recorded in deep seismic sounding — 194-314

See also Veytsman, P. S.

Pomeroy, P. W. Longperiod seismic waves from large, near-surface nuclear explosions — 196-167

See also Brune, J. N., and Sutton, G. H.

Pomîrleanu, V. V., and Barbu, Alexandrina. Geothermometric and structural petrologic study in the mineralized zone of the basin of the Nistru valley (Baia-Mare) — 201-223

Pomnik, V. I. See Savinskiy, K. A.

Pomortseva, N. V. See Vdovykin, G. P.

Ponomarev, V. N., and Moskvin, V. V. An H-component magnetometer for borehole measurements — 201-301

Ponomarev, V. N., and Zakharchenko, V. F. The magnetic field in a shaft in the presence of an ore body of spherical shape — 201-293

Poole, J. H. J. Radioactivity of sodium carbonate lava from Oldoinyo Lengai, Tanganyika — 202-256

Poole, W. H., Beland, J., and Wanless, R. K. Minimum age of Middle Ordovician rocks in southern Quebec — 203-1

Popenoe, Peter, Andreasen, G. E., and Kirby, J. R. Aeromagnetic map of the Peach Lake quadrangle, Fairfield County, Connecticut, and Putnam and Westchester Counties, New York — 197-279

—— Aeromagnetic maps of Connecticut — 197-280

Popenoe, Peter, Bromery, R. W., and Kirby, J. R. Aeromagnetic map of the Brewster quadrangle, Fairfield County, Connecticut, and Putnam County, New York — 197-277

—— Aeromagnetic maps of Connecticut — 197-278

Popenoe, Peter, and Zandle, G. L. Aeromagnetic maps of Massachusetts and Vermont — 203-280

See also MacKallor, J. A.

Popov, A. A. On the problem of the nature of the Central Kazakhstan gravitational field — 197-211

See also Kazanli, D. N., and Shcherba, G. N.

Popov, Nikolai. Nutational motion of the Earth's axis — 201-231

Popov, V. K. See Zhuravlev, V. P.

Popov, V. V. An experience in application of the AKS-L-51 on coal fields — 195-117

—— Interpretation of the self-polarization gradient curve in steeply dipping layers of anthracite — 198-118

—— On the interpretation of SP gradient curves in coal deposits — 200-139

See also Medvedev, S. V.

Popov, Ye. I. Determination of the correction for the Eötvös effect during measurement of the acceleration of gravity from an aircraft — 198-169

Abstract

Popov, Ye. I. Duration of observations of strongly damped gravimeters on a moving base 192-221
—— Experience of observations by strongly damped gravimeters on airplane and helicopter 194-202
—— Results of experimental determination of the acceleration of gravity in the air with an aircraft 203-199
See also Kuzivanov, V. A.
Popov, Yu. N. Attempt to register intermediate-period variations of the earth current field in the Sea of Azov 199-55
Popova, A. V. Paleomagnetic investigations of Paleozoic sedimentary rocks of Siberia 202-227
See also Vlasov, A. Ya.
Popova, S. V. See Stishov, S. M.
Pospelova, G. A. Some data of paleomagnetic investigations 202-229
Pospeyev, V. I. See Savinskiy, K. A.
Postma, G. W. See Van Melle, F. A.
Potapov, I. I. On the geologic development of the Earth 193-175
Potap'yev, S. V. On a procedure of studying systematic variations in average velocities in seismic logging 199-318
See also Krylov, S. V., and Lebedeva, G. N.
Potter, Kh. I., and Bystrov, N. F. Investigation of the figure of the Moon according to photographs taken near the moment of topocentric full moon 196-65
Pounder, E. R. The physics of sea-ice 202-298
See also Langleben, M. P.
Powell, D. W. Significance of differences in magnetization along certain dolerite dikes 203-272
Prakash, Prem. A residual method 193-192
Pratt, R. M. Great Meteor seamount 200-355
Preece, E. R. See Darnley, A. G.
Prentiss, D. D., and Ewing, J. I. The seismic motion of the deep ocean floor 203-69
Press, Frank, Dewart, Gilbert, and Gilman, Ralph. A study of diagnostic techniques for identifying earthquakes 200-99
See also Harkrider, D. G.
Priam, R. See Blot, C.
Price, A. T. Magnetic disturbance and the Earth's main field 192-250
—— Reply to Professor Chatterjee's comments 193-265
Price, P. B., and Walker, R. M. Fossil tracks of charged particles in mica and the age of minerals 203-8
—— Observation of fossil particle tracks in natural micas 196-3
Priem, H. N. A., Boelrijk, N. A. I. M., and Boerboom, A. J. H. Lead isotope studies of the lead-zinc deposits of southern Limburg, The Netherlands 195-11
Pritchard, D. H. See Callow, W. J.
Priyatkina, L. A., Maslenikov, V. A., and Borisova, K. D. Amphibole gneissic granodiorite 200-34
See also Maslenikov, V. A.
Priyezzhev, G. M. See Finger, D. L.
Proctor, C. M., Lowrey, A. R., Papadopulos, Emanuel, and Penning, J. R., Jr. Response of gamma scintillation detectors for field survey use 196-313
Proctor, C. M., Papadopulos, Emanuel, and Firminhac, R. H. Gamma scintillation probe for field use and measurements of radiation background in Puget Sound 196-314
Prodehl, Cl. See Behnke, Cl.
Prokof'yev, A. G. See Lomanyy, V. D.
Prokopenko, V. I. See Boyarskikh, G. K.
Pronicheva, M. V. Distribution and deformations of Paleogene planation surfaces within the sub-Ural plateau and northern Cis-Caspia 195-163

Abstract

Propretinskiy, I. F. Determination of the coefficients of diffusion of radon and of the emanating power of rocks from emanation sounding curves ---------- 194-298

Prorekhin, V. P. See Yastrebov, B. V.

Prosen, Dragutin. Contribution to the interpretation of the results of gravity investigations ---------- 193-194

— The geophysical activity of the Institute for Geological and Geophysical Research in Belgrade ---------- 198-137

Proshchenko, Ye. G. On the problem of determining the age of the metamorphic rocks of the Selennyakh Ridge (Yakut ASSR) ---------- 194-21

Prosser, N. J. D. See Olsson, I. U.

Provodnikov, I. Ya. See Nikolayev, V. A.

Pryakhin, A. P. On the accuracy of the topographic-geodetic operations in the methods of transients and of frequency sounding ---------- 199-89

Przewlocki, Kazimierz; Magda, Wilhelm; Thomas, H. H.; and Faul, Henry. Age of some granitic rocks in Poland ---------- 194-18

Przybyszewski, Eugeniusz. On the magnetic level of the country's observatories in the years 1955-1960 ---------- 192-269

Pshennikov, K. V. An approximate estimate of the energy of the aftershocks of the Middle Baikal earthquake of August 29, 1959 ---------- 195-51

— Angles of emergence of longitudinal waves for distant earthquakes (according to observations at the seismic stations of the Baikal area) ---------- 198-79

— Lg waves observed at Irkutsk ---------- 198-204

— Some features of aftershocks of earthquakes of Pribaikal'ye and Mongolia ---------- 194-79

See also Treskov, A. A.

Pshevlotskiy, K. S. Exploration for potassium salts in Poland by radiometric methods ---------- 193-324

Pskovskiy, Yu. P. Dusty material in the vicinity of the Earth ---------- 199-35

Puchelt, H. See Buschendorf, F.

Puchkov, G. G., and Rabinovich, B. I. Interpretation of VES curves of type H (with $\rho_3 \to \infty$) using auxiliary nomograms ---------- 198-106

Puchkov, S. V. An accelerograph and test of its use for recording strong ground movements in earthquakes and explosions ---------- 203-114

— Seismic conditions of the Ashkhabad zone ---------- 192-69

— Some characteristics of vibrations of the ground in earthquakes of the Peri-Baikal area ---------- 197-96

Pudovkin, I. M. Remarks on the note by G. N. Konstantinov, L. S. Konstantinova, and V. A. Filatov, "On the problem of the determination of the zero level of magnetic anomalies" ---------- 193-296

Pudovkin, I. M., and Kolesova, V. I. Application of the function $S(o,h)=Z(o,h)/\partial Z(0,h)/\partial h$ to the interpretation of magnetic anomalies ---------- 201-294

— Use of the geometric form of $\delta Z(P)/\delta h$ zero isolines in the interpretation of magnetic anomalies ---------- 201-296

Pudovkin, M. I., and Korotkin, A. B. Magnetic bay disturbances and their connection with ionospheric drifts ---------- 198-247

Pugach, V. B. See Markinin, Ye. K.

Puk'yanov, N. P. See Zhuk, I. Ya.

Punton, V. W. See Iyer, H. M.

Puranen, Maunu. A geophysical investigation of the Satakunta sandstone area in south-western Finland ---------- 203-160

Pushchina, L. V. Airborne gravimeter measurements in the U.S.A. (based on articles in American publications) ---------- 202-156

Pushkov, N. V. See Dolginov, S. Sh.

Putimtsev, G. N. Improvement of the RNP serial apparatus ---------- 198-330

Putzeys, J. V. See Duquesne, H.

Puzdrovskiy, Ye. P. See Demidenko, Yu. B.

Pyata, S. Ya. Apparatus for measuring the azimuthal deviation of boreholes in a magnetic medium in the iron ore deposits of the Kursk Magnetic Anomaly ---------- 200-180

Abstract

Pyatetskiy-Shapiro, I. I., Zhelankina, T. S., Keylis-Borok, V. I., Pavlova, L. G., and Reznyakovskiy, P. T. Determination of earthquake epicenters on an electronic computer ---------------- 203-72
Pyatnitskiy, V. I. See Dobrokhotova, I. A.
P'yavchenko, N. I. There never was a crater-------------------- 193-24

Q

Quarterly Journal of Seismology. The Hyuganada earthquake of Feb. 27, 1961 -- 192-53
—— The Kitamino earthquake of August 19, 1961----------------- 196-105
Queille-Lefèvre, Colette, and Cagniard, Louis. Evaluation of the geomagnetic dipole on the basis of the associated moments ------ 194-238
Quilty, J. H. The interpretation of aeromagnetic survey data------ 192-299
Quiring, Heinrich. The significance of the meteors for the formation of the heavenly bodies ----------------------------------- 197-29

R

Rabinovich, B. I., and Bukhmastov, A. F. On the expediency of using differential transformations in electrical surveying ------- 193-134
Rabinovich, B. I., and Kezhutin, N. G. Electrical sounding by the method of subtraction of fields ------------------------------ 193-137
Rabinovich, B. I., and Mikhaylov, Yu. Ya. Certain problems of differential transformations of VES curves ------------------- 195-107
See also Puchkov, G. G.
Rabinovich, G. Ya. Determination of average velocity from composite traveltime curves ------------------------------------ 199-322
Rabkin, M. I., and Milashev, V. A. The Kimberlite volcanism of the Siberian platform ------------------------------------- 202-351
Rackham, Thomas. A systematic microdensitometric technique and its applications to formations in the Mare Imbrium ------------- 196-78
Radhakrishnumurty, C. See Athavale, R. N.
Radmanovich, Max, and Hargraves, A. J. The strength of, and stress in, coal and coal mine rocks------------------------- 196-342
Radok, U. See Jennssen, D.
Rae, W. L. Lunar domes------------------------------------ 202-48
Raff, A. D. Magnetic anomaly over Mohole drill hole EM7 -------- 196-306
Rafter, T. A. See Grant-Taylor, T. L.
Raghava, M. S. See Balakrishna, S.
Ragozin, L. A. On the methodology of estimating the intensity of neotectonics of some regions of western Siberia---------------- 195-156
Raitt, R. W. See Fisher, R. L., and Northrop, John.
Rakhmanova, S. G. Attempt at correlation of the productive formations of the Tula and Aleksin horizons of the Volgograd district by linking electric log marker horizons with micropaleontologic data --- 194-161
Rakovets, O. A. See Lungergausen, G. F.
Rama. Atmospheric circulation from observations of natural radioactivity -- 202-261
See also Bhandari, N.
Ramana, Y. V. Ultrasonic velocities in quartzites and limestones - 194-114
Ramana, Y. V., and Subrahmanyam, Y. Effect of texture on ultrasonic wave velocities in sandstones -------------------------- 203-138
Ramanadham, R., and Murty, A. V. S. A thermistor thermometer for field studies -- 198-190
Ramber, Hans. Evolution of drag folds------------------------ 200-344
—— Fluid dynamics of viscous buckling applicable to folding of layered rocks -- 200-343
Ramdohr, Paul. The opague minerals in stony meteorites--------- 198-26

Abstract

Ramdohr, Paul, and Kullerud, Gunnar. Meteorites ---------- 192-14

Ramović, Mehmed. Notes on investigation of meteorites from the territory of Yugoslavia ---------- 193-94

Ramsden, D. See Watt, D. E.

Randall, M. J. Generation of horizontally polarized shear waves by underground explosions ---------- 194-106

Rankin, David. The magneto telluric effect on a dike ---------- 195-34

—— Reply to the discussion by J. T. Weaver ---------- 201-61

Ransone, Morris. See Northrop, John.

Rao, B. S. P. See Krishna Murthy, P. V.

Rao, B. S. R., and Bhimasankaram, V. L. S. Manganese ores of Andhra Pradesh ---------- 196-288

Rao, C. S. R. Study of the geomagnetic anomaly during sunspot maximum ---------- 193-277

Rao, K. K. See Gangadharam, E. V.

Rao, K. S. R. A comparative study of the geomagnetic S and L fields in the low latitude region ---------- 197-245

—— Solar daily geomagnetic variation in the low latitude region ---------- 192-281

Rao, K. S. R., and Thomas, C. T. Lunar and solar geomagnetic tides in the geomagnetic equatorial region. III. Geomagnetic tidal variations at Apia ---------- 192-257

Rao, M. B. R., and Anandalwar, M. A. Geophysical resurvey of Garimenapenta copper ore area in Nellore district ---------- 195-127

Rao, M. V. K. A. Estimate of neutron albedo on the Moon's surface resulting from cosmic radiation ---------- 203-54

Rao, V. B. See Higdon, W. T.

Rapolla, A. See Gasparini, P.

Rapoport, M. B. The seismolocator - A device for automatic preparation of seismic sections ---------- 197-336

See also Ryabinkin, L. A.

Rapp, R. H. A consideration of Hayford's best fitting ellipsoid data using the differential change equations of Vening Meinesz ---------- 199-135

Raspopov, O. M. See Berdichevskiy, M. N.

Rast, Horst. On the geology of the basalts in the Elbsandsteingebirge ---------- 195-300

Rastogi, R. G. Longitudinal inequalities in the lunar tide and in sudden commencement in H near the magnetic equator ---------- 203-255

—— Lunar tidal variations in the equatorial electrojet current ---------- 199-226

Rastrusin, Yu. B. See Okhatsimskaya, M. V.

Rastvorova, V. A. Comparison of recent tectonic movements and of the regional gravity field of the Caucasus and southwestern Turkmenia ---------- 195-176

—— Recent tectonics of the Great Caucasus in relation to its seismicity ---------- 195-55

Ratcliffe, E. H. The thermal conductivity of ice ---------- 192-196

Ratnikova, L. I. Experiment in the recording of converted reflecting waves ---------- 199-309

—— Some results of study of converted reflected waves in mediums with strong velocity differentiation ---------- 201-329

Raudonis, P. A. See Nekrasov, I. A.

Ravich, M. G., Krylov, A. Ya., Solov'yev, D. S., and Silin, Yu. I. Absolute age of rocks from the central part of the mountains in Queen Maud Land (East Antarctica) ---------- 197-28

Rawson, D. E. Review and summary of some Project Gnome results ---------- 198-98

Read, W. A. See Earp, J. R.

Rebinder, P. A. The structural-mechanical properties of rocks ---------- 196-345

Redmond, J. C. See Crowe, Christopher.

Reed, G. W. Heavy elements in the Pantar meteorite ---------- 200-50

Reed, R. K. See Moore, J. G.

Abstract

Rees, A. I. See Griffiths, D. H.
Reich, Hermann. Seismic investigations of the Flysch trough at Lenggries west and east of the Isar --- 199-340
Reid, G. C. See Axford, W. I.
Reilly, W. I. Gravity and crustal thickness in New Zealand --- 195-203
Reina, C. See Mongelli, F.
Remy, J.-M. The Matthew Island volcano (New Hebrides) --- 203-338
Reuter, J. H. See Kaplan, I. R.
Revina, L. D. See Vinogradov, A. P.
Reyes Lagos, Armando. See Mooser, Federico.
Reynolds, J. H. Xenology --- 201-25
 See also Butler, W. A.
Reynolds, M. A. See McKee, E. D.
Rey Pastor, Alfonso. Seismotectonic study of the "Levantine Ranges" --- 192-57
Reyre, Dominique. Observations on certain rhythms of epeirogenesis --- 195-150
Reyzner, G. I. See Gzovskiy, M. V.
Rezanov, I. A. Geologic interpretation of the Magadan-Kolyma deep seismic sounding profile --- 195-215
— Recent tectonics of the Turkmen-Khorasan mountains and their relation to seismicity --- 195-56
— The upper mantle and its influence on the development of the crust --- 202-185
Rezanov, I. A., and Kochetkov, V. M. Recent tectonics and seismic regionalization of the northeast USSR --- 200-87
 See also Gzovskiy, M. V., and Zhdanov, V. V.
Rezvanov, R. A. See Leypunskaya, D. I.
Reznyakovskiy, P. T. See Pyatetskiy-Shapiro, I. I.
Ribosh, L. A. See Shteynberg, G. S.
Rice, D. A. A geoidal section in the United States --- 192-178
Richard, H. See Desaint, R.
Richards, A. F. Volcanic sounds: investigation and analysis --- 196-353
Richards, J. R. Isotopic composition of Australian leads. 3. Northwestern Queensland and the Northern Territory--A reconnaissance --- 200-46
 See also Evernden, J. F.
Richter, D. H. See Moore, J. G.
Ricke, Werner. See Buschendorf, F., and Gehlen, Kurt von.
Ridder, N. A. De, and Lensen, G. J. Indirect evidence for transcurrent faulting and some examples from New Zealand and the Netherlands --- 203-176
Riihimaa, J. J. A telerecording seismograph --- 202-71
Riihimaa, J. J., and Teikari, P. J. An automatic four-position spot brightener --- 202-72
Rikitake, Tsuneji. A possible cause of earth-current anisotropy --- 200-76
— Electromagnetic induction within an anisotropic plane sheet over a non-conductor and underlain by a uniform semi-infinite conductor --- 200-75
— Possibility of detecting the mantle low-velocity layer by geomagnetic deep sounding --- 195-292
Rikitake, Tsuneji, Yabu, Takeo, and Yamakawa, Kazumi. The anomalous behaviour of geomagnetic variations of short period in Japan and its relation to the subterranean structure. The 10th report (An analysis of the s.f.e. on Aug. 16, 1958) --- 200-77
Rikitake, Tsuneji, Yokoyama, Izumi, Uyeda, Seiya, and Yukutake, Takesi. Geomagnetic studies on Volcano Mihara --- 203-350
Rikitake, Tsuneji, and Yukutake, Takesi. A theory of s.f.e. current systems --- 193-282
 See also Nagata, Takesi.

Abstract
Riley, G. H., and Compston, W. Theoretical and technical aspects of Rb-Sr geochronology 197-5
Ringwood, A. E. A model for the upper mantle, 2 192-245
—— Olivine-spinel transformation in cobalt orthosilicate 199-199
—— Phase transformations in the mantle 202-187
—— Prediction and confirmation of olivine-spinel transition in Ni_2SiO_4 194-223
—— Present status of the chondritic earth model 197-46
—— The origin of high-temperature minerals in carbonaceous chondrites 197-36
Ringwood, A. E., and Kaufman, Larry. The influence of high pressure on transformation equilibria in iron meteorites 194-40
Ringwood, A. E., and Seabrook, Merren. Cohenite as a pressure indicator in iron meteorites--II 194-39
—— High-pressure phase transformations in germanate pyroxenes and related compounds 202-188
—— Some high-pressure transformations in pyroxenes 195-219
See also Frederiksson, Kurt, and Green, D. H.
Rioult, Michel. See Dangeard, Louis.
Rishbeth, H. Ionospheric storms and the morphology of magnetic disturbances 202-213
Rist, Sigurjón. Investigations on Vatnajökull in 1960 195-182
Ritsema, A. R. P and S amplitudes of two earthquakes of the single force couple type 193-77
See also Scholte, J. G. J.
Rittenberg, S. C. See Kaplan, I. R.
Rittmann, Alfred. On the mechanism of persistent volcanic activity 202-332
—— The ascent of magmas 202-333
—— Volcanoes and their activity 193-357
Rivière, André. On a possible factor in orogenesis 200-189
Rivkin, I. Ya. Basic parameters of logging stations 201-145
Rivosh, L. A. See Artamonov, L. V.
Riznichenko, Yu. V. On the tasks of the symposium on deep seismic sounding 194-310
Riznichenko, Yu. V., and Fedynskiy, V. V. Conference of a working group on the Earth's crust in Paris, March 19-22, 1962 202-171
Riznichenko, Yu. V., and Shamina, O. G. Modeling of longitudinal waves in the Earth's upper mantle 201-108
Riznik, Ya. Ye. See Petkevich, G. I.
Roach, C. H., Johnson, G. R., McGrath, J. G., and Sterrett, T. S. Thermoluminescence investigations at Meteor Crater, Arizona 193-351
Roberts, A., Emery, C. L., and Chakravarty, P. K. Photoelastic coating technique applied to research in rock mechanics. Part 1, Laboratory investigations 200-347
Roberts, H. R. See Allsopp, H. L.
Roberts, J. A. Radio emission from the planets 200-73
Roberts, R. J. See Mabey, D. R.
Robertson, E. C. Creep of Solenhofen limestone under moderate hydrostatic pressure 195-336
Robertson, E. I., and Macdonald, W. J. P. Electrical resistivity and ground temperature at Scott Base, Antarctica 198-133
Robertson, W. A. Paleomagnetism of some Mesozoic intrusives and tuffs from eastern Australia 198-269
See also Irving, E.
Robinson, E. S. Geophysical investigations in McMurdo Sound, Antarctica 195-328
See also Crary, A. P.

Abstract

Robinson, L. J. Banded craters ---------- 197-58

Robson, G. R., Barr, K. G., and Smith, G. W. Earthquake series in St. Kitts-Nevis 1961-62 ---------- 192-46

See also Barr, K. G.

Rocard, Yves. Amplitude of seismic waves from 2,100 to 2,800 km in France in a north-south direction ---------- 196-170

—— Effect of depth or altitude of an explosion on its seismic signals ---------- 194-118

See also Écollan, Jean, and Mechler, Pierre.

Rochester, M. G. Geomagnetic core-mantle coupling ---------- 193-266

Rodden, C. J. See Finley, H. O.

Rode, K. P. On the nature of the Alpine orogeny and crustal evolution ---------- 199-147

Roden, R. B. Electromagnetic core-mantle coupling ---------- 199-214

Rodionov, P. F. On the interpretation of the anomaly field over charged elongated conductors ---------- 201-133

Rodionov, P. F., and Golubev, L. N. On the geoelectrical structure and nature of the conductivity anomalies of the Gay ore field - 201-134

See also Kononenko, I. I.

Rodriguez B., A., Steinhart, J. S., and Asada, Toshi. The San Agustin fault system of southern Peru ---------- 193-79

See also Steinhart, J. S.

Rodzyanko, G. N. The western Ciscaucasus in the neotectonic stage - 195-175

Roen, J. B. See Englund, K. J.

Roeschmann, Fritz. Geoelectric measurements on a loam occurrence in the Harz ---------- 193-138

Roethlisberger, Hans. Ultrasonic measurements of deformation around a rectangular ice tunnel ---------- 202-303

See also Meyer, A. U.

Rogachev, B. V., Sedel'nikov, E. S., Kharganov, G. Kh., and Neizler, S. M. Application of the charge method using alternating current in a gold deposit ---------- 194-143

Rogers, J. J. W. See Heier, K. S.

Rogov, B. I., and Kuptsov, K. S. Portable radioactivity logging apparatus of the gamma-59 type ---------- 199-303

Rogoza, O. I., and Garanin, V. A. On the nature and features of the waves observed in tracing faults by the correlation refraction method ---------- 201-110

Rokityanskiy, I. I. Distribution of pc micropulses with respect to amplitude ---------- 203-66

—— Interference observed during registration of earth currents ---- 202-51

See also Okhatsimskaya, M. V.

Roksandíc, M. M. Note on the relation of Bouguer anomalies and crustal structure of the Dinarides of the southwest of Crna Gore - 193-230

Roman, Irwin. The kernel function in the surface potential for a horizontally stratified earth ---------- 199-85

Roman, Lucjan. Measurements of temperature in the Magnuszew borehole ---------- 195-209

—— Problem of the relative resistivity of beds ---------- 197-155

—— Stress envelopes in the Magnuszew borehole ---------- 201-333

Romanov, F. I. See Boyarskikh, G. K.

Romanov, N. N., and Romanova, I. A. Attempt at the application of high-accuracy gravity surveying in the study of primary deposits of diamonds under conditions of trap development ---------- 199-180

Romanov, V. V., and Soyfer, V. N. Apparatus and procedure for measurement of natural tritium ---------- 199-281

Romanova, I. A. See Romanov, N. N.

Romberg, F. E. An inverted-pendulum seismometer element for horizontal motion ---------- 197-103

—— Analytical expressions for transients in seismometer-galvanometer systems ---------- 198-80

Abstract

Romney, Carl, Brooks, B. G., Mansfield, R. H., Carder, D. S., Jordan, J. N., and Gordon, D. W. Travel times and amplitudes of principal body phases recorded from GNOME --- 195-101

Ronca, L. B. See Zeller, E. J.

Roots, E. F. Canadian Polar Continental Shelf Project, 1959-62 --- 193-155

Roques, Maurice. See Bonhomme, Michel.

Ros, Joaquin. See Delibrias, Georgette.

Rosenbach, Otto, and Schmitt, O. Program control of the sensitivity of seismic measuring apparatus --- 202-272

Rosenbach, Otto, Schmitt, O., and Vees, R. The quantitative recording of seismic events with extremely large amplitude variations by discontinuous gain control --- 202-273

Rosholt, J. N., Jr., and Antal, P. Evaluation of the Pa-231/U - Th-230/U method for dating Pleistocene carbonate rocks --- 198-4

Rosholt, J. N., Jr., Shields, W. R., and Garner, E. L. Isotopic fractionation of uranium in sandstone --- 195-231

Rösler, H. J. The variation of susceptibility and its causes in a thick diabase sill in Thuringia --- 195-281

Rösler, Rolf. Galvanically induced polarization of disseminations of rotation-ellipsoidal particles --- 193-127

—— Telluric records in northern Sweden --- 196-103

Ross, D. I. Surface magnetic permeability measurements on some Taranaki ironsand deposits --- 202-225

Ross, W. E., and Evans, A. E. Record of observations at Agincourt Magnetic Observatory 1955 and 1956 --- 202-202

—— Record of observations at the Agincourt Magnetic Observatory 1957 and 1958 --- 195-245

Rosser, W. G. V. Changes in the structure of the outer radiation zone associated with the magnetic storm of September 30, 1961 --- 200-268

Rossi, B. See Bonetti, A.

Rosso de Luna, I. The geostructural lineaments and the rhegmagenetic disjunctions. Their importance in the planning of exploration for petroleum and ground water --- 198-157

Rostovtsev, N. N., Gurari, F. G., and Rudkevich, M. Ya. Procedure of prospecting-exploratory operations on oil and gas in the West Siberian Lowland and the conditions for increasing their geologic effectiveness --- 200-159

Roth, F. J. The use of explosives in geophysics --- 203-144

Roth, R. E. See Bonner, F. T.

Rothé, J.-P. Catalogue of the seismicity of the globe during the year 1960 (seismological chronicle) --- 198-62

—— Radiogeologic map of the Hercynian Vosges - Gerardmer sheet at 1:50,000 --- 196-319

—— Radiogeologic map of the Hercynian Vosges - Thann sheet at 1:50,000 --- 196-320

—— The earthquake of Agadir and the seismicity of Morocco --- 195-48

See also Beaufils, Yvonne.

Roubault, Marcel, and Coppens, René. Study of the radioactivity of rocks from deep drilling of the Mortagne (Vendee) granite massif - 193-308

—— Study of the radioactivity of rocks incasing a uraniferous deposit --- 196-308

—— Vein uranium deposits in crystalline rocks and radioactivity of the surrounding rocks --- 200-305

Rouse, Irving. See Stuiver, Minze.

Rousseau, Pierre. The earthquakes --- 195-46

Roussel, Jacques. Study of scale models of the phenomena of induced polarization --- 197-146

—— Study on reduced models of the phenomena of induced polarization --- 193-125

Rovnina, L. V. See Boyarskikh, G. K.

Abstract
Roy, Amalendu. Discussion on "Investigation of upward continuation systems" by L. L. Nettleton and J. R. Cannon ---- 203-193
— New interpretation techniques for telluric and some direct current fields ---- 199-47
Roy, B. C. General report of the Geological Survey of India for the year 1958. Geophysical section ---- 199-121
— General report of the Geological Survey of India for the year 1959 ---- 198-141
Roy, J. L. Response of an astatic magnetometer to a cylindrical rock specimen ---- 195-277
Roy, Rustum. See Dachille, Frank.
Roy, S. K., Glass, J. J., and Henderson, E. P. The Walters meteorite ---- 200-51
Rozanov, Yu. A. Deformation of carbonate rocks at high pressures and elevated temperatures ---- 199-355
See also Zaleskiy, B. V.
Rozenberg, V. I. Block tectonics of the Anabar-Khatanga interfluve area ---- 199-120
Rozenshtok, Yu. L. See Kaganov, M. A.
Rozova, Ye. A. Seismic regionalization of the territory of Kirgiz -- 193-72
Rubakha, F. I. See Sukharina, A. N.
Rubin, Meyer, Likins, R. C., and Berry, E. G. On the validity of radiocarbon dates from snail shells ---- 196-4
Rubin, Meyer, and Taylor, D. W. Radiocarbon activity of shells from living clams and snails ---- 203-6
See also Daniels, R. B., Hopson, C. A., and Skinner, H. C. W.
Rubinshteyn, M. M. Absolute geochronological scale ---- 193-1
Rubinshteyn, M. M., and Gel'man, O. Ya. On the necessity of unifying the values of the radioactive decay constants of K-40 used in calculation of absolute age ---- 194-3
Rudajev, V. Experimental investigations of the variations of the dielectric constant as a function of pressure ---- 193-151
Rudd, E. A. Petroleum developments in southwest Pacific region during 1961 ---- 192-156
Ruddock, K. A. Optically pumped rubidium vapor magnetometer for space experiments ---- 192-260
Rudel, A. The age of the volcanoes of the chain of Puys (France) -- 202-15
Rudich, Ye. M. On the relationship of deep earthquakes of eastern outlying districts of Asia with large crustal structures ---- 202-119
Rudkevich, M. Ya. See Rostovtsev, N. N.
Rudnitskiy, P. M. Preliminary results of a study of the Volodarsk group of magnetic anomalies ---- 195-302
Rudnitskiy, V. P. Methodology of studying surface conditions by using a sonde ---- 198-323
Rudowicz, Jan. See Kopia, Henryk.
Ruhle, G. C. A report on the Puna Rift eruption of Kilauea Volcano, February 28-May 26, 1955 ---- 195-346
Runcorn, S. K. A new mechanism for convection in the mantle and continental accretion ---- 197-175
— Convection and thermal histories of Earth and Moon ---- 202-163
— Convection currents in the Earth's mantle ---- 193-256
— Convection in the mantle ---- 202-164
— Convection in the Moon ---- 192-40
— Growth of the Earth's core ---- 199-202
See also Nairn, A. E. M.
Rushbrook, P. R., and Ehmann, W. D. Iridium in stone meteorites by neutron activation analysis ---- 194-32, 196-35
Rusinov, B. Sh., and Sholpo, L. Ye. Magnetic cleaning of specimens of Kazakhstan effusives ---- 198-264
Rusinov, L. A. See Yakzhin, A. A.

Abstract

Rusk, S. K. See deBremaecker, J. Cl.

Ruskol, Ye. L. On the origin of the concentration of interplanetary dust around the Earth --- 196-52

—— On the origin of the Moon. I. The formation of a swarm of bodies around the Earth --- 198-35

—— On the origin of the Moon, II. Development of the Moon in a swarm of circumterrestrial satellites --- 201-47

—— Tidal evolution of the system Earth-Moon --- 201-89

Rusnak, G. A., Bowman, A. L., and Östlund, H. G. Miami natural radiocarbon measurements II --- 203-22

Rustanovich, D. N. See Kats, A. Z.

Rutshteyn, S. M. See Petrovskiy, A. D.

Rutten, M. G. The Precambrian atmosphere --- 199-38

Ryabinkin, L. A. Results and prospects of the application of the RDR (regulated directional reception) method --- 197-330

Ryabinkin, L. A., Napalkov, Yu. V., Znamenskiy, V. V., Voskresenskiy, Yu. N., and Rapoport, M. B. Theory and practice of the seismic method of controlled directional reception --- 201-336

Ryabinkin, L. A., and Znamenskiy, V. V. On distinguishing waves of weak intensity by the method of controlled directional reception --- 210-335

See also Trigubov, A. V.

Ryabov, A. V. See Yakovlev, A. T.

Ryaboy, V. Z., and Shteynberg, G. G. Some results of the laboratory application of controlled directional reception (RNP) of seismic waves in the interpretation of deep seismic sounding data --- 194-317

See also Belousov, V. G., Godin, Yu. N., and Vol'vovskiy, I. S.

Ryan, T. G. See Soberman, R. K.

Rybach, Ladislaus. Radiometric investigations in the Misoxer basin area --- 198-292

Rybach, Ladislaus, and Hafner, Stefan. Radioactivity measurements on rocks of the St. Gotthard profile --- 199-278

Rybak, R. S. See Bezuglaya, L. S.

Rykov, A. V. Application of magnetic modulator and resonance amplifier in an apparatus for tape recording of energy flux of seismic waves --- 197-105

Rykunov, L. N. See Belotelov, V. L.

Ryss, Yu. S. Geophysical methods in the search for deep-lying deposits of the Rudnyy Altay --- 196-197

—— Observations by the method of natural electrical field in mines - 194-135

Ryss, Yu. S., Ivanov, N. N., Fisak, V. M., and Zazaynov, Yu. V. Prospecting and mapping of pyritized zones and graphitized rocks by the self-potential method on a small scale --- 197-141

See also Vigdorovich, D. A.

Ryzhenko, B. N. See Khitarov, N. I.

Ryzhova, T. V., and Aleksandrov, K. S. Elastic properties of the rock-forming minerals. Pt. 4. Nepheline --- 200-120

S

Saastamoinen, P. Travel times for a crustal model in Finland --- 202-177

Sabantsev, S. B. See Lin'kov, Ye. M.

Sabini, P. See Gasparini, R. A.

Sachs, Maureen. See Taylor, S. R.

Sackett, W. M., and Thompson, R. R. Isotopic organic carbon composition of recent continental derived clastic sediments of Eastern Gulf Coast, Gulf of Mexico --- 201-232

Saemundsson, T. Origin of sudden commencements --- 192-283

Safiannikoff, A. See Monteyne-Poulaert, G.

Safontsev, A. A. On the application of geophysical logging measurements to cyclic analysis --- 198-131

Abstract

Safontsev, A. A. The application of geophysical measurements in boreholes in cyclical analysis 197-150

Safronov, N. I. Procedure of prospecting operations for finding hidden ore deposits 200-179

Sagalova, Ye. A. On the seismic regime of the Vrancea region 193-71

See also Yevseyev, S. V.

Saggerson, E. P. Geology of the Kasigau-Kurase area 200-20

Sagitov, M. U. Graticule for calculation of W_{zzz} for two-dimensional bodies of known transverse cross section 200-199

Sagitov, M. U. See Grushinskiy, N. P.

Saha, A. K. See Sarkar, S. N.

Saha, B. P. A seismometric study of the Russian nuclear explosion on 30 October 1961 193-121

—— Determination of sedimentary thickness in the Shillong plateau by microseisms 192-312

—— On the crustal P* phase at intermediate distances 192-95

Sahasrabudhe, P. W. See Athavale, R. N.

Saint Amand, Pierre. Observations and interpretation of the Chilean earthquakes of 1960 197-66

—— Two ways of measuring seismicity 203-70

Saito, Jin. Geological study on mineral springs in Hokkaido 200-359

Saito, Masanori. See Takeuchi, Hitoshi.

Saitō, Tomosaburō. See Odani, Yoshitaka.

Sakai, O. The Ibaraki-oki earthquake of January 16, 1961 192-51

Sakamaki, Yukio. See Hamachi, Tadao.

Sakamoto, K. Classification of the types of seismograms obtained at Wakanai 202-68

Sakharnikov, N. A., and Volkov, D. M. Methods of calculating the field of a point source in the presence of a vertical layer 197-138

Sakurai, K. See Maeda, Hiroshi.

Salikhov, A. G. Main results of gravity-magnetic investigations in connection with the prospects of exploration of oil-bearing structure in Tataria and adjacent areas 193-231

—— On the practical applicability of some formulas for determination of depth of masses disturbing the gravitational field 195-193

See also Krinari, A. I.

Salimova, Z. G. See Blankov, Ye. B.

Salisbury, J. W. Discussion of a paper by C. D. McGillem and B. P. Miller, "Lunar surface roughness from crater statistics" 198-37

Salomonovich, A. Ye. Thermal radioemission of the Moon in the centimeter wave range and some characteristics of its surface layer 196-61

Salova, G. I. See Lebedinskiy, A. I.

Salop, L. I. Geologic interpretation of data of the argon method of determination of the absolute age of rocks 201-3

Sal'tsevich, V. B. See Sen'ko, A. K.

Samkov, B. N. See Medvedev, S. V.

Sammel, E. B. Configuration of the bedrock beneath the channel of the lower Merrimack River, Massachusetts 193-333

Šamšula, Jiří. Measurement of the frequency spectrum of seismic signals 194-308

Šamšula, Jiří, and Malý, Vratislav. Apparatus for determination of the natural frequency and sensitivity of geophones 194-327

—— Remote control of the polarity and of the zero position of electrodynamic pickups (geophones) 194-326

Samuseva, R. N. Construction of an isochronal chart showing the movement of a tsunami in the vicinity of the Kurile Islands 195-79

Samutin, L. A. Attempt at radiometry of the samples of a metallometric survey 198-285

Abstract

Sandrea, A. P. See Jérémine, Elisabeth

Sanford, A. R., and Holmes, C. R. Microearthquakes near Socorro, New Mexico ---------- 193-63

Sanna, S. See Mattana, N.

Sano, Y. Morphological studies on sudden commencements of magnetic storms using rapid-run magnetograms during the IGY (I) -- 194-268

—— Morphological studies on sudden commencements of magnetic storms using rapid-run magnetograms (including studies on sudden impulses) (II) ---------- 202-220

Sano, Y., Nagai, M., and Yanagihara, Kazuo. Some analyses of Dst and DS-fields of magnetic storms during the IGY (II) -------- 194-267

See also Nagai, M.

Sanselme, Henri. See Despois, Jacques, and Durand, G. L. A.

Santo, T. A., and Båth, Markus. Crustal structure of Pacific Ocean area from dispersion of Rayleigh waves ---------- 196-265

Sapporo, D. M. O., and Obihiro Weather Station. The Hiroo-oki earthquake of April 23, 1962 ---------- 196-106

Sarkar, S. N., and Saha, A. K. On the occurrence of two intersecting Pre-Cambrian orogenic belts in Singhbhum and adjacent areas, India ---------- 200-44

Sarkisov, G. A., and Andreyev, L. I. Results and prospects of marine electrical surveying in the Caspian Sea---------- 199-101

Sarma, V. V. J. A general formula tripotential prospecting method ---------- 200-126

—— Modified tripotential prospecting method ---------- 196-176

—— Reply by authors to discussion by W. T. Higdon ---------- 199-114

Sarna, R. P. See Kusumgar, S.

Sasinovych, V. S. Optical method of studying tectonic models ----- 199-149

Sass, J. H., and LeMarne, A. E. Heat flow at Broken Hill, New South Wales ---------- 201-219

See also Jaeger, J. C.

Sass, L. C., and Neff, C. H. Petroleum developments in South America and Caribbean area ---------- 192-145

Sastry, A. V. R. Statistical analyses of radioactivity data on Peninsular and Closepet granites from Mysore State, South India--- 194-294

Sato, Koji. On the thermal springs and geology of Izu-Hakone ----- 199-358

Sato, Ryosuke. Love waves in case the surface layer is variable in thickness ----------194-104, 200-116

Sato, Takahiro. Submarine topography in the environs of the Kushiro submarine canyon ---------- 196-352

Sato, Takahiro, and Hoshino, Michihei. Submarine geology of the Enshu-nada Sea, southern Honshu ---------- 196-351

Sato, Yasuo. A note on the relation between the initial motion and the azimuthal characteristic of a focus from the view-point of the phase shift near the origin ---------- 200-110

Sato, Yasuo, Matsuda, Tokihiko, and Sibano, Muturo. Earthquake which occurred in the northern part of Miyagi Prefecture, Japan, on April 30th, 1962 ---------- 196-108

Sato, Yasuo, and Usami, Tatsuo. Basic study on the oscillation of a homogeneous elastic sphere. I. Frequency of the free oscillations ---------- 202-78

—— Basic study on the oscillation of a homogeneous elastic sphere. II. Distribution of displacement ---------- 202-79

—— Basic study on the oscillation of a homogeneous elastic sphere. III. Boundary conditions and the generation of elastic waves ----- 202-80

Sato, Yasuo, Usami, Tatsuo, and Ewing, Maurice. Basic study on the oscillation of a homogeneous elastic sphere. IV. Propagation of disturbances on the sphere ---------- 202-81

Sato, Yasuo, and Yamaguchi, Rinzo. Coupling effect of shear vibrations of the structure with elastic foundations, and the maximum response or rocking motion ---------- 192-93

See also Sykes, Lynn, and Usami, Tatsuo.

Abstract

Sato, Yoshiaki, Hoshino, Kazuo, and Sugai, Kanji. Report on the geology and the radiometric survey at Hiruzen-bara, Okayama Prefecture ---- 198-297
Satrran, V. See Smejkal, Vaclav.
Saukov, A. A. V. I. Vernadskiy and the natural radioactivity of the Earth ---- 199-277
Saurin, Emile. Age, according to carbon-14, of the marine terraces of Ca Na (South Viet-Nam) ---- 199-24
Savadskiy, O. A. Seismomagnetic method of prospecting for deep-occurring magnetite bodies ---- 198-276
Savage, C. N. Geomagnetics and geologic interpretation of a map of eastern Bonner County ---- 196-305
Savage, J. C., and Paterson, W. S. B. Borehole measurements in the Athabasca glacier ---- 202-143
 See also Paterson, W. S. B.
Savarenskiy, Ye. F. B. B. Golitsyn and some problems of modern seismology ---- 199-65
—— Study of the interior of the Earth by seismic data ---- 194-224
Savarenskiy, Ye. F., Gubin, I. Ye., and Kharin, D. A. Earthquakes in the USSR ---- 192-58, 197-77
Savarenskiy, Ye. F., and Valdner, N. G. Observations of Lg and Rg waves and remarks about the nature of Lg_1 ---- 192-98
—— Observations of Lg and Rg waves from the Black Sea basin earthquakes ---- 192-96
 See also Belotelov, V. L., and Linden, N. A.
Savchenko, N. A. See Permyakov, V. V.
Savenko, B. Ya. See Krutikhovskaya, Z. A.
Savich, A. I. See Nikitin, V. N.
Savinskiy, I. D. A possibility of obtaining information relative to the distribution of radioactive matter along the normal to an interface in a medium ---- 201-316
—— Solution of reverse geophysical problems described by Fredholm integral equations of the first order ---- 201-163
Savinskiy, K. A., Pospeyev, V. I., Pomnik, V. I., and Gusak, M. T. Structure and oil and gas possibilities of the Chuna-Biryusa uplift ---- 195-125
Savit, C. H. See Ludwig, W. J.
Savrasov, D. I. Some information on the effectiveness of the use of magnetic survey methods in the search for bedrock deposits of diamonds ---- 193-305
Sawada, M., Ozima, Minoru, and Fujiki, Y. Magnetic properties of cubanite ($CuFe_2S_3$) ---- 200-278
Sayganov, E. A. See Vol'fshteyn, P. M.
Sazhina, N. B. Thickness of the Earth's crust and its relation to relief and gravity anomalies ---- 193-189
Scearce, C. S. See Heppner, J. P.
Schaeffer, O. A. See Bassett, W. A., Bonner, F. T., Gentner, W., and Heymann, D.
Schäffner, H.-J. Earthquake mechanics in the Aleutian Arc region- 194-78
—— Orthogonalization of some fault plane solutions ---- 193-80
Scheffer, Viktor. On some regional geophysical problems of the Carpathian Basin ---- 196-194
—— Some geophysical considerations concerning the Flysch problem ---- 198-159
Scheidegger, A. E. Finite strain in tectonic deformations ---- 192-185
—— Geometrical significance of isallo stress ---- 202-123
—— On the tectonic stresses in the vicinity of a valley and a mountain range ---- 203-180
—— Principles of geodynamics, 2d. ed ---- 201-171
 See also Fara, H. D.

Abstract

Schell, Richard. See Gilbert, Freeman.
Scherb, F. See Bonetti, A.
Schieber, Michael. See Perel, Joseph.
Schlich, Roland, See Lebeau, André.
Schmid, Erwin. The Earth as viewed from a satellite ------------ 202-111
Schmidt, Edgar. See Wachsmuth, Gunther.
Schmidt, R. A. Australites and Antarctica ---------------------- 196-59
Schmitt, O. See Rosenbach, Otto.
Schmitt, R. A., Smith, R. H., Lasch, J. E., Mosen, A. W., Olehy, D. A., and Vasilevskis, J. Abundances of the fourteen rare-earth elements, scandium, and yttrium in meteoritic and terrestrial matter -- 203-42
See also Murthy, V. R.
Schneider, Otto. A generalization of the phase-law of lunar geomagnetic tides -- 203-248
Schnetzler, C. Ç. See Chase, J. W.
Schoeps, Dietrich. The determination of plumbline deflection ------ 203-168
Scholte, J. G. J. Oblique propagation of waves in inhomogeneous media -- 196-144
—— The mechanism at the focus of an earthquake - Part I ---------- 192-103
Scholte, J. G. J., and Ritsema, A. R. Generation of earthquakes by a volume source with moment ---------------------------- 193-78
Schreiner, G. D. L. See Allsopp, H. L.
Schreyer, Werner. See Davis, G. L.
Schult, Axel. On the magnetization of the basalt occurrences in the vicinity of Göttingen -- 198-261
Schultz, R. See Hallof, P. G.
Schulz, Gerhard. The mean error in velocity calculations from the curvature of reflections -- 192-329
Schumann, F. W. See Coertze, F. J.
Schumann, G. Investigation of radon daughters ------------------ 203-303
Schumm, S. A. The disparity between present rates of denudation and orogeny -- 203-174
Schutz, T. C. See deBremaecker, J. Cl.
Schütze, W. On the dating of lead minerals ---------------------- 194-1
Schwaetzer, Tomi. On the identification of marker horizons in refraction surveying in the Gulf of Lions ------------------------ 199-339
See also Morlet, J.
Schwarz, E. J. A paleomagnetic investigation of Permo-Triassic red beds and andesites from the Spanish Pyrenees ------------- 200-282
Scott, J. H. Computer analysis of gamma-ray logs --------------- 201-315
—— Two nomographs for computation of standard equations in earth-resistivity interpretation -- 201-119
Sea Frontiers. Submerged volcanoes off the east coast ------------ 196-349
Seabrook, Merren. See Ringwood, A. E.
Sebestyén, Károly. Well logging investigation methods in coal prospecting -- 198-310
Secor, G. B., Meyer, H. J., and Hinze, W. J. A density determination by underground gravity measurements in Michigan ----- 203-203
Sedel'nikov, E. S. See Rogachev, B. V.
Sedova, F. I. On the diurnal distribution of earth current pulsations at different latitudes -- 199-51
Seedsman, K. R. See Milton, B. E.
Segerstrom, Kenneth, Casertano, Lorenzo, and Galli O., Carlos. Eruptions of water and sand resulting from an earthquake near Concepción, Chile -- 201-67
Segesman, F. New SP correction charts ------------------------ 194-156
Seifers, Heinrich. Earth tide analysis on the ZUSE Z 23 ---------- 203-128
Seigel, H. O. New developments in mineral exploration ----------- 199-124
See also Wagg, D. M.

Abstract

Seki, A. Relations between the distribution of epicenters and initial motion of earthquakes observed at Matsushiro -------------- 202-63
Sell Cantalapiedra, J. I., and Gutíerrez Diéz, J. L. A case of the use of geophysical methods in locating caves and fissures ------- 192-134
Sells, Cedric. See Jeffreys, Harold.
Semenenko, N. P., Kotlovskaya, F. I., and Demidenko, S. G. Determinations of the age of metamorphic schists of the Baikal-Sayan mountain area by the Academy of Sciences of the Ukrainian SSR -- 196-25
Semenov, A. S., Petrovskiy, A. D., Sviyazheninov, F. I., Makarov, A. N., Veksler, V. I., and Kharlamov, I. P. Test of electrical surveying operations in the study of deep-occurring sulfide veins- 197-139
Semenov, A. S., Turchaninov, L. V., and Barkhatov, D. R. The method of mean gradient in large-scale geologic mapping ------- 194-123
Semenov, G. S. Some results of investigation of the composition of the natural gamma-field over gas deposits of the Bukhara-Khiva depression --- 199-285
Semenov, Ye. V. See Gulin, Yu. A.
Semenova, T. M. See Gulin, Yu. A.
Sendai, D. M. O. The earthquake in the northern part of Miyagi Prefecture on April 30, 1962 --------------------------------- 196-107
Senftle, F. E. See Thorpe, A. N.
Sen'ko, A. K., and Sal'tsevich, V. B. The gamma-neutron logging method of beryllium -- 200-317
Sen'ko-Bulatnyy, I. N., and Kharus, R. L. Some problems of the theory of neutron measurements in boreholes ----------------- 201-318
See also Belykh, V. A., Bulashevich, Yu. P., and Deyev, L. L.
Serafim, J. L., and Lopes, J. J. B. "In situ" shear tests and triaxial tests of foundation rocks of concrete dams ---------------- 198-350
Serbulenko, M. G. On the resolving power of mathematical methods of separating potential fields ---------------------------- 193-202
Serbulenko, M. G., and Gusev, Yu. M. An electronic modeling differentiator and its use in the interpretation of geophysical data -- 193-207
Serdinov, A. I. See Dayev, D. S.
Serdyukova, A. S. See Kapitanov, Yu. T.
Serebryakov, Ye. B. See Pavlovskiy, V. I.
Serebryannyy, L. R. The radiocarbon method and its application to the study of the paleogeography of the Quaternary period -------- 195-9
Serebryannyy, L. R., Devirts, A. L., and Markova, N. G. New data on the absolute age of the Allerőd deposits in the vicinity of Leningrad --- 202-22
Sergeyev, O. P. Procedure for prospecting and exploring siderite and limonite ores of the Bakal type -------------------------- 200-153
Seriff, A. J. See Van Melle, F. A.
Serikov, Yu. I. Anomalous radioactivity of clays ---------------- 202-257
Serova, A. D. See Podoba, N. V.
Serra, A. See Mattana, N.
Service Hydrographique de la Marine and Compagnie Générale de Géophysique. Tidal gravity corrections for 1963 --------------- 196-233
Setser, J. L. See Ehmann, W. D.
Shabanova, A. I. Calculation on the electronic digital computer "Ural-1" of the characteristics of the gravitational field, using the expansion of gravity anomalies in series of spherical functions -- 196-227
Shablinskaya, N. V. Method of tectonic regionalization of the basement of the West Siberian Lowland according to geophysical data- 200-220
Shafranovs'kiy, I. I. See Lichkov, B. L.
Shaginyan, S. A. Reduced seismic accelerations in earthquakes --- 203-76
See also Medvedev, S. V.

Abstract

Shalayev, S. V. On the calculation of the effect of a flat earth's surface in electrical surveying ---------------------------------- 198-103

— On the use of specific points of potential fields in the interpretation of geophysical data ---------------------------------- 200-200

Shal'nov, B. V. See Anishchenko, G. N.

Shamina, O. G. See Riznichenko, Yu. V.

Shand, J. A. A note on geomagnetic and ionospheric records ------ 192-279

See also Duffus, H. J., English, W. N., and Lokken, J. E.

Shan'gin, N. V., and Shifrin, V. Ya. Dependence of longitudinal wave velocity on porosity and its use in ultrasonic seismic well logging ---------------------------------- 197-339

Shan'gin, N. V., Voronkov, O. K., and Yudborovskiy, I. Kh. Variations of the modulus of elasticity of rocks with depth and their relation to geologic factors ---------------------------------- 197-126

Shanin, L. L. See Afanas'yev, G. D.

Shapiro, I. I. New method for investigating micrometeoroid fluxes ---------------------------------- 203-47

Shapiro, I. R. See Cain, J. C.

Shapiro, R. P. See Kaufman, A. A.

Shapiro, Ralph. See Ward, F. W., Jr.

Shapirovskiy, N. I. See Ali-Zade, A. A.

Shapley, A. H., and Lincoln, J. V. International Geophysical Calendar for 1963---------------------------------- 197-170

Shaposhnikov, K. K. Crustal structure in the northeastern USSR according to geophysical data ---------------------------------- 193-247

Shaposhnikov, K. K., and Shaposhnikova, K. I. Certain problems of the tectonic regionalization of northeastern Yakutia according to geophysical data---------------------------------- 195-200

Shaposhnikova, K. I. See Shaposhnikov, K. K.

Sharonov, V. V. A lithologic interpretation of the photometric and colorimetric studies of the planet Mars ---------------------- 196-97

Shashkin, V. L. See Lebedev, S. G., and Troitskiy, S. G.

Shats, M. M. See Starik, I. Ye.

Shatsov, A. N. See Yermakov, V. I.

Shaub, Yu. B. Aeroelectrical surveying by the method of a rotating magnetic field in LI-2 and AN-2 aircraft ---------------------- 202-93

— Evaluation of the effectiveness of the helicopter variant of the method of induction ---------------------------------- 193-130

— Use of correlation analysis for processing geophysical data ---- 203-278

Shavoronkin, I. A. See Pavlovskiy, V. I.

Shaw, E. W. CanadianRockies - orientation in time and space ----- 201-183

Shaw, S. H. Some aspects of geophysical surveying for ground water ---------------------------------- 202-109

Shcheglov, S. N. See Dobrokhotov, Yu. S.

Shchelovanov, V. G. See Karasik, A. M.

Shcherba, G. N. Some problems in the prospecting for covered W, Mo, and Bi fields in the example of Central Kazakhstan --------- 201-156

Shcherba, G. N., and Popov, A. A. Some data on the thickness of the Earth's crust in the southern part of East Kazakhstan ------- 196-262

Shcherbak, N. P. See Burkser, Ye. S.

Shcherbakov, D. I. Better understanding of the Earth's interior --- 192-152

Shcherbakov, D. I., and Afanas'yev, G. D. On some problems in connection with knowledge of the deep interior of the Earth------ 197-216

Shchitov, N. A. See Garkalenko, I. O.

Shchuko, O. B. See Krotikov, V. D.

Shebalin, N. V. Intensity, magnitude, and focal depth of earthquakes ---------------------------------- 192-83

See also Kirnos, D. P.

Shechkov, B. N., and Yurkevich, O. I. Determination of the thickness of the Earth's crust in the Ukrainian crystalline massif according to surface wave dispersion ----- ---------------------- 193-246

Abstract

Shechter, H. See Freier, S.
Sheffey, N. B. See Grantz, Arthur.
Sheina, I. P. See Afanas'yev, G. D.
Shemyakin, M. M. Remarkable chains of lunar craters -- 200-72
Shemyakin, Ye. A. Determination of the elements of the attitude of contacts of two mediums by the resistivity method -- 200-132
 See also Blokh, I. M.
Shengelaya, G. Sh. See Balavadze, B. K.
Shenkareva, G. A. See Gzovskiy, M. V.
Sheptunov, V. I. See Gunenko, V. I.
Shevchenko, V. R. On a procedure for interpretation of longitudinal reflected wave traveltime curves -- 199-319
Sheynmann, Yu. M. A mechanism of formation of oceanic magma -- 202-174
—— On the nature of ultrabasic alkaline volcanic provinces on continents -- 202-127
Shibata, Ken, and Miller, J. A. Potassium-argon ages of granitic rocks from the Kitakami Highlands -- 198-19
Shibata, Ken; Miller, J. A.; Yamada, Naotoshi; Kawata, Kiyoo; Murayama, Masaro; and Katada, Masato. Potassium-argon ages of the Inagawa granite and Naégi granite -- 196-28
 See also Miller, J. A.
Shibato, Kihei, Studies for the vertical distribution of spontaneous polarization potential on the rocks around the vein type deposit and origin of S. P. (no. 1) -- 192-142
Shields, W. R., Garner, E. L., Hedge, C. E., and Goldich, S. S. Survey of the Rb-85/Rb-87 ratios in minerals -- 199-208
 See also Rosholt, J. N., Jr.
Shifrin, V. Ya. See Shan'gin, N. V.
Shikhalibeyli, E. Sh. The volcanism of the Lesser Caucasus as a consequence of the block-folding evolution of the Anti-Caucasus geosyncline -- 202-130
Shima, Etzuzo. Modifications of seismic waves in superficial soil layers as verified by comparative observations on and beneath the surface -- 195-67
Shima, Makoto, Gross, W. H., and Thode, H. G. Sulfur isotope abundances in basic sills, differentiated granites and meteorites -- 200-242
Shima, Makoto, and Honda, Masatake. Isotopic abundance of meteoritic lithium -- 200-239
 See also Thode, H. G.
Shima, Masako. Isotopic composition of germanium in meteorites -- 202-30
Shimanskaya, N. M. See Bedcher, A. Z.
Shimazu, Yasuo. Physical and physico-chemical theory of generation, upward transfer, differentiation, and explosion of magmas -- 203-334
—— Physical theory of generation, upward transfer, differentiation, and explosion of magmas -- 193-251
Shimozuru, Daisuke. Elasticity of rocks at high temperatures with special reference to the nature of the low velocity layer in the crust and the upper mantle of the Earth -- 202-189
—— Geophysical evidences for suggesting the existence of molten pockets in the Earth's upper mantle -- 203-232
—— Temperature distribution and the possibility of the existence of a magma pocket in the upper mantle of the Earth -- 195-220
Shirane, G. See Cox, D. E.
Shirgaokar, A. J., and Maeda, Hiroshi. Local time dependence of the magnitude of geomagnetic-storm sudden commencements -- 199-232
Shirokov, A. S. Attempt at application of aerial shots in seismic surveys in the German Democratic Republic -- 198-334
—— Improvement of procedure and technique of geophysical operations in the exploration of useful minerals (summary) -- 200-178
—— Main tasks of exploration geophysics -- 199-126
 See also Borisov, A. A.

Abstract

Shirokova, Ye. I. On the stresses acting at the focus of earthquakes in the Caucasus and adjacent regions ---- 195-61
  See also Balakina, L. M.
Shiryayev, I. Ye., and Blokhin, P. A. Some geological results of geophysical investigations on the Russian platform and in central Asia ---- 194-173
Shishkin, P. T., and Orlova, N. I. On the calibration of the measuring part of the argon apparatus ---- 198-3
Shitikhin, V. V. Procedure of measurements of the azimuthal deviation of boreholes in the iron ore deposits of the USSR ---- 200-181
Shkabarnya, N. G. See Ogil'vi, A. A.
Shmelev, A. K. River seismic survey operations in the West Siberian Lowland ---- 197-344
Shneyerson, M. B., and Yefimkina, S. S. Some results of the use of the refraction correlation method for prospecting gentle structures in the eastern part of the Russian platform ---- 200-339
  See also Borisov, A. A.
Shneyerson, V. B., and Skosyreva, L. N. Determination of the surface properties of natural samples of rocks and soils in prospecting for oil and gas by the radiometric method ---- 199-288
Shnip, O. A. See Knyazev, V. S.
Shoemaker, E. M. Ballistics and throwout calculations for the Lunar crater Copernicus ---- 194-60
Shoemaker, E. M., and Chao, E. C. T. New evidence for the impact origin of the Ries Basin, Bavaria, Germany ---- 194-55
Shoemaker, E. M., and Eggleton, R. E. Terrestrial features of impace origin ---- 194-51
  See also Moore, H. J.
Shokin, P. F. Gravimetry- Apparatus and methods for measuring gravity ---- 203-190
Sholpo, G. P. See Gasanenko, L. B.
Sholpo, I. Ye., and Yanovskiy, B. M. On the problem of the stability of remanent magnetization ---- 197-254
  See also Rusinov, B. Sh.
Shor, G. G., Jr., Moore, D. G., and Huckabay, W. B. Deep-sea tests of a new nonexplosive reflection profiler ---- 197-326
Shouval-Sergeer, N. M. Aeroelectric prospecting in the Soviet Union ---- 192-130
Shraybman, V. I. See Godin, Yu. N., and Vol'vovskiy, I. S.
Shteynberg, G. G. See Ryaboy, V. Z.
Shteynberg, G. S., Ribosh, L. A., and Chirkov, A. M. Magnetic survey in the vicinity of the Avacha group of volcanoes on Kamchatka ---- 193-306
Shukina, T. B. See Mishin, V. M.
Shukolyukov, Yu. A. On calculation of the age of the Earth's crust by the rubidium-strontium method ---- 195-1
—— Xenon isotopes in monazites ---- 202-201
Shukolyukov, Yu. A., and Mirkina, S. L. Determination of the absolute age of monazites by the xenon method ---- 203-7
  See also Gerling, E. K.
Shuldeyev, M. P. See Berdichevskiy, M. N.
Shul'ts, S. S. See Miroshnichenko, V. P., and Nikolayev, N. I.
Shulyat'yev, S. A. See Belykh, V. A.
Shuman, B. M. See Hutchinson, R. O.
Shumskiy, P. A. On the theory of glacier variations ---- 200-196
Shurbet, D. H. The high frequency P and S phases from the West Indies ---- 193-92
Shurkin, K. A. Magmatic rocks of the Belomore complex ---- 202-18
—— Migmatized rocks of the Belomore series ---- 202-17
—— Vein formations of the Belomore complex ---- 202-19

Abstract

Shushakov, S. D. Some results of regional seismic investigations carried out in the area of the Susunai depression, Sakhalin Island -------- 193-343
Shustova, L. Ye. The Bothnian-Kandalaksha zone of deep downwarping of the Earth's crust in the central part of the Baltic shield -------- 197-209
Shute, B. E. See O'Keefe, J. A.
Shvank, O. A. Theoretical curves of the vertical component of gravitational attraction and their use in the interpretation of gravity anomalies -------- 199-159
Shvarts, Ya. B. See Davydova, N. I.
Sibano, Muturo. See Sato, Yasuo.
Sidorenko, N. S. Problem of the nature of irregularities in the rotation of the Earth -------- 203-118
Siebert, Manfred. The separation of a two-dimensional magnetic field into external and internal portions by means of the Cauchy integral formula -------- 198-218
Siegler, V. B. See Hurley, R. J.
Sigal, L. A. Graticule of BKZ-S-2-ρ_p/ρ_s -------- 199-109
—— Recognition of permeable horizons in a well section and estimation of the nature of their saturation -------- 198-117
Sigalove, J. J. See Damon, P. E.
Siggerud, Thor. See Heintz, Natascha.
Sigl, Rudolf. Recalculation of the geopotential height differences by means of normal gravity for the West German part of the R. E. U. N -------- 196-208
Signer, Peter, and Nier, A. O. C. The measurement and interpretation of rare gas concentrations in iron meteorites -------- 197-37
Sigurgeirsson, Thorbjörn. See Friedman, Irving.
Siikarla, Toivo. On geophysical investigations of the Kemi chromite occurrence -------- 196-195
Sikharulidze, D. I. Dispersion of Love waves and study of Earth's crust structure from observation data of the Tbilisi seismic station -------- 198-197
Sikka, D. B. Aero-gamma ray spectrometer aids in the detection of faults -------- 198-291
—— Radiometric survey of Ten Section Oilfield, California, U. S. A -- 198-290
Silayeva, O. I. Ultrasonic investigations of the velocity of propagation of elastic waves and of the elastic parameters in rock samples under unilateral pressure -------- 198-91
Silin, Yu. I. See Knyazev, V. S., Krylov, A. Ya., and Ravich, M. G.
Silver, L. T., McKinney, C. R., Deutsch, Sarah, and Bolinger, J. Precambrian age determinations in the western San Gabriel Mountains, California -------- 200-13
See also Wasserburg, G. J.
Sima, Hiromu. On the surface waves generated by small explosions: Parts I and II -------- 202-89
—— On the velocity of Lg waves in Japan -------- 193-93
Simeon, G., and Sposito, A. Peculiarity in the variations of emf at some Italian stations -------- 192-266
Simić, Nevenka, and Simić, Vladan. Results of radiochemical investigations of some samples taken in the Iverak terrain -------- 203-311
Simič, Vladan. Investigation of the continuity and uranium possibilities of structural zones by the methods of specific electrical resistivity and radioactive emanations -------- 194-132
See also Simić, Nevenka.
Simler, L. See Denozière, P.
Simon, G. See deVuyst, A.
Simonen, Ahti. Age and general characteristics of the Finnish basement complex -------- 197-22

Abstract

Simonenko, T. N. On the use of magnetometer data for purposes of explaining the deep structure of the Earth's crust in platform regions 193-302
Simonson, G. H. See Daniels, R. B.
Sims, A. R. See Sonett, C. P.
Singer, S. F., and Walker, E. H. Electrostatic dust transport on the lunar surface 197-57
 See also Apel, J. R.
Singh, R. N., and Tolpadi, S. K. Magnetic field of the F-region from h'-f records 193-278
Sinitsyn, A. P. On the causes of the generation of beats in vibrations of structures 197-98
— On the limit of resistance of resistance of buildings to seismic influences 203-93
Sinyagina, M. I. Investigation on recent vertical movements in the Earth's crust in the USSR 194-194
Sippel, R. F. Sodium self diffusion in natural minerals 197-6
Sissons, J. B. A re-interpretation of the literature on late-glacial shorelines in Scotland with particular reference to the Forth area 200-193
— Reply [Discussion on J. B. Sissons' paper on late-glacial shorelines] 200-194
Sitton, G. A. See deBremaecker, J. Cl.
Sjögren, Bengt. Seismic refraction and reflection measurements on glaciers at Erzberg, East Greenland 192-338
Skalak, R. See Deresiewicz, H.
Skalský, Lumír. See Pícha, Jan.
Skhirtladze, N. I. Some features of the post-Paleogene effusive volcanism of Georgia 202-131
Skillman, T. L. See Heppner, J. P.
Skinner, B. J. See Skinner, H. C. W.
Skinner, H. C. W., Skinner, B. J., and Rubin, Meyer. Age and accumulation rate of dolomite-bearing carbonate sediments in South Australia 198-21
Skinner, N. J. See Osborne, D. G.
Skoczek, Hanna. See Gryglewicz, Zofia.
Skorupa, Jan. Application of geophysical methods in the prospecting for coal in Upper Silesia 201-150
— Contribution to the behavior of the zero level of BMZ magnetometers over long periods of time 197-237
— Interconnection of the Magnetic Observatories of Świder, Pruhonice, and Hurbanovo in the years 1955 and 1957, affected by means of QHM and BMZ magnetometers 197-238
Skosyreva, L. N. See Shneyerson, V. B.
Skripchenko, N. S., Veselovskiy, N. V., and Alekseyev, A. P. Isotopic composition of sulfur in pyrite of the chalcopyrite deposits of the North Caucasus 202-199
Skugarevskaya, O. A. See Koroleva, K. P.
Sky and Telescope. Getting acquainted with astronomy. The Moon—III 203-60
Slack, H. A., and Otte, Carel. Electric log interpretation in exploring for stratigraphic traps 193-146
Slaucitajs, Leonidas. See Winch, D. E.
Slavinskaya, A. A. See Panchenko, N. I.
Slemmons, D. B. The Dixie Valley - Fairview Peak earthquakes of December 16, 1954 200-86
Slichter, L. B. Secular effects of tidal friction upon the Earth's rotation 202-74
 See also Harrison, J. C.
Slivkov, V. I. See Gunenko, V. I.

Abstract

Sloan, R. E., and Danes, Z. F. A geologic and gravity survey of the Belle Plaine area, Minnesota ---- 199-171
Slutskovskiy, A. I. Wide-range seismic amplifier ---- 201-342
Smejkal, Vaclav, and Sattran, V. Results of work of the Geochronological Laboratory of the Central Geological Institute in Prague (K-Ar method) ---- 192-7
Smith, C. W. See Henderson, J. R. Jr.
Smith, E. J., Davis, Leverett, Jr., Coleman, P. J., Jr., and Sonett, C. P. Mariner II. Preliminary reports on measurement ments of Venus -- magnetic field ---- 198-41
  See also Sonett, C. P.
Smith, F. C. See Andreasen, G. E., and Henderson, J. R., Jr.
Smith, G. H. See Darnley, A. G.
Smith, G. W. See Robson, G. R.
Smith, J. G. See Ludwig, W. J.
Smith, J. M. See Adivarahan, P., and Kunii, D.
Smith, N. J. Geophysical activity in 1961 ---- 194-169
Smith, R. H. See Schmitt, R. A.
Smith, R. L. See Friedman, Irving.
Smith, S. W. A reinterpretation of phase velocity data based on the GNOME traveltime curves ---- 195-98
—— Generation of seismic waves by underground explosions and the collapse of cavities ---- 198-100
  See also Phinney, R. A.
Smith, T. J. See McCamy, Keith.
Smith, W. E. T. Earthquakes of eastern Canada and adjacent areas 1534-1927 ---- 194-69
Smekhov, Ye. M. Experience of methodical investigation of fractured reservoirs of oil and gas and means of their practical application ---- 194-158
—— Procedure for exploring oil and gas deposits with jointed reservoirs ---- 200-143
Smelov, A. A., Zhogolev, L. P., and Khabibullina, R. I. On the natural remanent magnetization of rocks ---- 197-253
Smirnov, L. Ye. See Polyakov, N. T.
Smirnov, R. V. On short-period pt-type fluctuations of the natural electrical field in the sea ---- 196-100
Smol'nikov, B. M. On interpretation of vertical electrical sounding curves ---- 194-127
Snelling, N. J. Age of the Roraima Formation, British Guiana ---- 202-12
—— Potassium-argon dating of rocks north and south of the Grenville front in the Val d'Or region, Quebec ---- 197-15
  See also Hamilton, E. I.
Snodgrass, F. E. See Haubrich, R. A., and Munk, W. H.
Snodgrass, J. M. See Von Herzen, R. P.
Sobakar', G. T. Development of a network of gravimetric base points by the method of triangular polygons ---- 193-198
—— On a simple relationship between the accuracy of a survey, density of observation points, scale of representation, and contour interval of isoanomalies in gravimetric and magnetometric investigations ---- 193-199, 198-170
Sobakar', G. T., and Lebedev, T. S. Attempt to calculate the effect of relief in gravimetric investigations in mountainous areas - 199-163
  See also Lebedev, T. S.
Soberman, R. K., and Hemenway, C. L. Micrometeorite collection from a recoverable sounding rocket. III ---- 201-39
Soberman, R. K., Hemenway, C. L., Ryan, T. G., Chrest, S. A., Frissora, J., and Fullam, E. F. Micrometeorite collection from a recoverable sounding rocket. I ---- 201-37
Soberman, R. K., and Lucca, L. D. Micrometeorite measurements from Midas II (Satellite 1960 ζ 1) ---- 201-36
  See also Hemenway, C. L.

Abstract

Sobolev, N. D. On the sima layer of the Earth ---------- 201-225

Sobolev, V. S. Physicochemical investigations on magma and processes related to it, carried on in the USSR in 1957-59 ---------- 203-335

Sobotovich, E. V., and Grashchenko, S. M. Determination of the age of rocks by their uranium, thorium, and lead isotope content ---------- 199-2

See also Starik, I. Ye.

Sobouti, M. On the mechanism at the focus in the seismic arc between the Hindu-Kush and the Mediterranean ---------- 201-71

Sochel'nikov, V. V. Calculation of the magnetic field of a straight grounded cable at points on the surface ---------- 199-91

Socolow, A. A. Geologic interpretation of the aeromagnetic maps of Hummelstown, Palmyra, and Bernville Quadrangles ---------- 195-296

Soday, Harry. See Bromery, R. W

Soffel, H. Investigations on some ferrimagnetic oxide and sulfide minerals with the powder pattern method ---------- 198-250

Sokhranov, N. N., and Gerasimov, N. N. The automatic logging laboratory AKS-4 ---------- 199-107

Sokolov, B. N. See Sollogub, V. B.

Sokolov, G. V. See Belen'kiy, B. V.

Sokolov, M. M., Ochkur, A. P., Sozanskaya, Ye. Ye., Fedorov, A. A., and Bol'shakov, A. Yu. Use of the methods of gamma- and beta-ray scattering for the solution of some geologic problems ---------- 199-298

See also Ochkur, A. P.

Sokolov, V. I. See Kiryushina, M. G.

Sokolova, V. V. See Kirichek, M. A.

Sokolovskiy, I. L. See Bondarchuk, V. G.

Solecki, R. S., and Leroi-Gourhan, Arlette. Paleoclimatology and archaeology in the Near East ---------- 203-16

Solidilov, L. N. See Yevdokimov, G. S.

Sollogub, V. B. Structural regionalization of the southern Ukrainia and Kuban according to geophysical data ---------- 193-158

Sollogub, V. B., Chekunov, A. V., Khilinskiy, L. A., and Garkalenko, I. A. Results of experimental seismic work to study the internal structure of the crystalline basement in the northern part of the Krivoy Rog basin ---------- 193-339

Sollogub, V. B., Lossovskiy, Ye. K., Khilinskiy, L. A., Gorbenko, V. S., Sokolov, B. N., and Nikiforov, B. S. Use of high-frequency seismic surveying for the purpose of differentiating the metamorphic rock complex of the Belozerka iron ore deposit ---------- 198-338

Solomon, A. See Vasiliu, I.

Solomon, M. See Taylor, S. R.

Solonenko, V. P. Determination of epicentral zones of earthquakes according to geological indications ---------- 196-117

—— Some problems of modern seismic microregionalization ---------- 194-73

Solonenko, V. P., Treskov, A. A., and Florensov, N. A. The catastropic earthquakes in the Mongolo-Baikal seismic zone in 1957 and seismic dislocations related to them ---------- 195-52

Solov'yev, D. S. See Ravich, M. G.

Solov'yev, O. A. On the problem of determination of magnetic properties of rocks on the astatic magnetometer of Yankovskiy ---------- 194-277

—— Problem of subdividing magnetic anomalies into ore-bearing and non-ore-bearing ---------- 198-275

—— Use of the frequency method for determination of some parameters of magnetic bodies ---------- 193-295

Solov'yev, S. L. General outline of the seismicity of the USSR ---------- 192-60

—— Magnitude of earthquakes ---------- 192-86

—— Seismology in Sweden ---------- 203-117

Abstract

Solov'yev, S. L., and Solov'yeva, O. N. Exponential distribution of the total number of earthquake aftershocks and the decrease in their mean value with depth ---------- 200-93

Solov'yeva, I. A. See Gurariy, G. Z.

Solov'yeva, O. N. See Solov'yev, S. L.

Somayajulu, Y. V. Changes in the F region during magnetic storms ---------- 198-242

Somers, M. L., and Stubbs, A. R. A mud echo-sounder ---------- 196-338

Somerton, W. H., Ward, S. H., and King, M. S. Physical properties of Mohole test site basalt ---------- 196-164

Sonett, C. P. The distant geomagnetic field. 2. Modulation of a spinning coil EMF by magnetic signals ---------- 198-222

—— The distant geomagnetic field. 4. Microstructure of a disordered hydromagnetic medium in the collisionless limit ---------- 198-224

Sonett, C. P., and Abrams, I. J. The distant geomagnetic field. 3. Disorder and shocks in the magnetopause ---------- 198-223

Sonett, C. P., Sims, A. R., and Abrams, I. J. The distant geomagnetic field. 1. Infinitesimal hydromagnetic waves ---------- 198-221

Sonett, C. P., Smith, E. J., and Sims, A. R. Survey of the distant geomagnetic field ---------- 192-255

See also Smith, E. J.

Sopel'nikov, M. D. See Bryzzhev, L. D.

Southworth, R. B. On S. H. Dole's paper "The gravitational concentration of particles in space near the Earth" ---------- 202-34

Soya, Tatsunori. See Katsui, Yoshio.

Soyfer, V. N. See Romanov, V. V.

Sozanskaya, Ye. Ye. See Sokolov, M. M.

Spiess, F. N. See Harrison, J. C.

Spiridonov, V. P. See Belen'kiy, B. V.

Sposito, A. See Simeon, G.

Spreiter, J. R., and Jones, W. P. On the effect of a weak interplanetary magnetic field on the interaction between the solar wind and the geomagnetic field ---------- 201-247

Springis, K. Ya. Some traces of manifestations of recent tectonic movements in the Verkhoyansk-Kolyma folded region ---------- 195-172

Springis, Ye. N. On recent movements in the Latvian synclinal depression ---------- 195-157

Squires, D. F. Carbon-14 dating of the fossil dune sequence, Lord Howe Island ---------- 201-21

Srinivasan, J. See Jain, M. K.

Srivastava, K. See Cohen, J.

Srivastava, S. P., Douglass, J. L., and Ward, S. H. The application of the magnetotelluric and telluric methods in central Alberta ---------- 201-64

Stacey, F. D. A generalized theory of thermoremanence, covering the transition from single domain to multi-domain magnetic grains ---------- 195-274

—— A new mechanism for convection in the mantle and continental accretion ---------- 197-174

—— The physical theory of rock magnetism ---------- 201-271

—— The theory of creep in rocks and the problem of convection in the Earth's mantle ---------- 197-222

—— Theory of magnetic susceptibility of stressed rock ---------- 192-289

Stacey, F. D., and Westcott, P. Possibility of a 26- or 27-month periodicity in the equatorial geomagnetic field and its correlation with stratospheric winds ---------- 200-249

Stackler, W. F. See Thyssen-Bornemisza, Stephen.

Stadukhin, V. D. Determination of the magnetic susceptibility of rocks in place by measuring the magnetic flux of a square frame- 201-126

—— Determination of the magnetic susceptibility of rocks in place using the intensity of the magnetic field in the center of a square frame ---------- 201-125

Abstract

Stajniak, Jósef. See Tarass, Nasser.

Stamatiu, M. Physical and mechanical properties of the mineralized mass and of the encasing rocks of veins 6 and 10, horizon - 90 m, Musariu Mine of the Barza Mining Enterprise ----------- 200-351

—— Physical and mechanical properties of the mineralized mass and of the wall rocks of the principal vein, horizon XII-W of Baia Sprie ----------- 200-350

Stammberger, Friedrich. Three important tasks of earth scientists in the German Democratic Republic ----------- 193-166

Staplin, F. L. Organic remains in meteorites - A review of the problem ----------- 196-46

Starik, I. Ye., and Aleksandruk, V. M. Application of spectral isotopic analysis to the strontium method of age determination--- 202-5

Starik, I. Ye., and Arslanov, Kh. A. New C-14 ages of some Quaternary deposits of the European part of the USSR----------- 199-21

Starik, I. Ye., Lovtsyus, G. P., Sobotovich, E. V., Grashchenko, S. M., Shats, M. M., and Lovtsyus, A. V. Isotropic composition of lead in meteorites and the problems of their origin------- 199-28

Starik, I. Ye., Sobotovich, E. V. On the geochemistry of the lead isotopes ----------- 199-207

—— The age of meteoric bodies and of the Earth according to radioactivity data----------- 196-6

—— The age of the Earth ----------- 195-2

Starik, I. Ye., Sobotovich, E. V., and Shats, M. M. On the problem of the origin of meteorites and tektites ----------- 200-49

Starik, I. Ye., Sobotovich, E. V., Shats, M. M., and Grashchenko, S. M. On the problem of the origin of tektites ----------- 193-48

Starik, I. Ye., Vorob'yev, G. G., Sobotovich, E. V., Shats, M.M., and Grashchenko, S. M. Origin and age of tektites----------- 199-43

Starik, I. Ye., and Zharkov, A. P. Application of the radiocarbon method to the study of present-day sedimentation processes ----- 199-23

Staritsyn, G. V. See Pavlov, N. N.

Starostenko, V. I. Diagram for calculating V_{zzzz} and V_{zzxx} of two-dimensional bodies of arbitrary cross-section ----------- 203-201

—— Relationship of the higher derivatives of the potential along the vertical to the vertical gradients of the horizontal components of the intensity of a gravitational field ----------- 200-201

Stauder, William. Note concerning the southeast Missouri earthquake of March 3, 1963----------- 200-84

—— The focal mechanism of earthquakes ----------- 199-63

Stauder, William, and Bollinger, Gilbert. Pn velocity and other seismic studies from the data of recent southeast Missouri earthquakes ----------- 198-77

Stauder, William, and Udias, Agustin. S-wave studies of earthquakes of the North Pacific, Part II ----------- 196-118

Stauffer, Heinz, and Honda, Masatake. Cosmic-ray-produced stable isotopes in iron meteorites ----------- 193-30

Stavrovskiy, A. S. Elastic displacements of the Earth's crust caused by a tsunami wave propagating at an angle to the shoreline ----------- 195-78

Steen, G. See Williams, G. D.

Steenburgh, W. E. van. Geophysics in the Department of Mines and Technical Surveys ----------- 200-172

—— The Polar Continental Shelf Project ----------- 200-175

Steenland, N. C. Discussion of "Tools for tomorrow's geophysics"- 199-125

—— Discussion on "An evaluation of basement depth determinations from airborne magnetometer data," by Peter Jacobsen, Jr ----- 201-298

Stefănescu, S. S., and Nabighian, M. N. Magnetic disturbance fields induced by perpendicular layers in a direct current ------- 193-129

Stefant, Robert. See Gendrin, Roger.

Abstract

Stegena, Lajos. See Hwang, Yen-hu, and Márton, P.
Steinbrugge, K. V., and Flores A., Roderigo. The Chilean earthquakes of May, 1960: A structural engineering viewpoint 197-87
Steinert, Harald. Earthquakes 201-70
Steinhart, J. S., Green, Ronald, Asada, Toshi, Rodriguez B., A., Aldrich, L. T., and Tuve, M. A. The Earth's crust 197-219
See also Green, Ronald, and Rodriguez B., A.
Stelzner, Johannes. See Vaněk, Jíři.
Sten'ko, V. A. See Vinogradov, A. P.
Stepanov, Yu. V. Reliability of results of prospecting work in the Yun'yagin deposits of the Pechora coal basin 193-150
Stephens, H. G. See Morris, E. C.
Stephenson, L. P., and Tooley, R. D. Discussion of "Effect of porosity, grain contacts, and cement on compressional wave velocity through synthetic sandstones" by Andris Viksne, J. W. Berg, Jr., and K. L. Cook 195-93
Stern, T. W. See Faul, Henry, Ford, A. B., Grantz, Arthur, and Stieff, L. R.
Sterrett, T. S. See Roach, C. H.
Stewart, S. W., and Pakiser, L. C. Crustal structure in eastern New Mexico interpreted from the GNOME explosion 195-97
Stick, J. C., Jr., Swift, Gilbert, and Hartline, Ralph. A review of current technique in gamma-ray and neutron log interpretations 193-320
Stieff, L. R., Stern, T. W., and Eicher, R. N. Algebraic and graphic methods for evaluating discordant lead-isotope ages 198-1
Stiller, Heinz. See Frölich, Friedrich.
Stiller, Siegfried. See Israël, Hans.
Stishov, S. M. On the core-mantle boundary 195-224
—— On the equilibrium line between coesite and the rutile-like modification of silica 203-229
Stishov, S. M., and Belov, N. V. On the crustal structure of the new dense modification of silica SiO_2 197-218
Stishov, S. M., and Popova, S. V. A new dense modification of silica 197-217
Stockwell, C. H. A tectonic map of the Canadian shield 200-17
—— Second report on structural provinces, orogenies, and time-classification of rocks of the Canadian Precambrian Shield 198-13
Stoenner, R. W. See Bassett, W. A.
Stolarik, J. D. See Cain, J. C.
Stone, D. B. Anisotropic magnetic susceptibility measurements on a phonolite and on a folded metamorphic rock 199-238
Stoneley, R. S. The interior of the Earth 192-239
Storm, R. G. See Palm, Ann.
Stott, P. M. The magnetization of Red Hill dike, Tasmania 198-268
See also Irving, E.
Stovas, M. V. Displacement of a point on the surface of a deformed homogeneous incompressible ellipsoid of revolution due to a change in compression 195-145
Stovas, M. V., and Usenko, D. N. Briefly on the gravitational-inertial forces of the planet 196-138
Stozharov, N. B. Use of electrical surveying methods under permafrost conditions 199-93
Strakhov, N. M. See Peyve, A. V.
Strakhov, V. I. Some remarks concerning the work of N. L. Afanas'yev "Smoothing of gravity anomalies" 203-198
Strakhov, V. N. Analytical continuation of electrical fields as applied in some methods of electrical exploration with direct current 201-120
—— Analytical continuation of electrical fields in a conducting half space 201-121

Abstract

Strakhov, V. N. Analytical continuation of two-dimensional potential fields and its application to solution of the inverse problem of magnetic and gravimetric exploration, Pt 1 and 2 ---- 198-168
—— Analytical continuation of two-dimensional potential fields and its application to the solution of the inverse problem of magnetic and gravimetric exploration, Pt. 3 ---- 199-157
—— Determination of I/σ for obliquely magnetized two-dimensional bodies ---- 201-287
—— On ways of formulating the mathematical theory of interpretation of magnetic and gravitational anomalies ---- 201-288
—— Some computing schemes for finding the second vertical derivatives of potential fields ---- 200-198
—— Some estimations of depth of occurrence of disturbing masses -- 199-154
—— Theory of the calculation of the second vertical derivatives of potential fields ---- 200-197
See also Lapina, M. I.
Straley, H. W. See Burdick, G. A.
Strange, W. E. See Woollard, G. P.
Strelkov, S. A. See Kiryushina, M. G.
Strenger, H. See Jones, L.
Stride, A. H. Current-swept sea floors near the southern half of Great Britain ---- 202-306
Stroyev, P. A. See Tsukernik, V. B.
Strunz, Hugo. Uranium discoveries in Bavaria from 1804 to 1962 -- 197-307
Struve, Otto. The solar system: Its origin and evolution ---- 194-23
Strzetelski, Janusz. The geologic structure and petroleum possibilities in Poland and between Kozalin and Gdánsk on the basis of results of regional geophysical and hydrochemical investigations ---- 192-230
Stuart, A. W., and Bull, C. Glaciological observations on the Ross Ice Shelf near Scott Base Antarctica ---- 197-190
Stuart, D. J. See Dempsey, W. J.
Stubbs, A. R. See Somers, M. L.
Stuckenrath, Robert, Jr. University of Pennsylvania radiocarbon dates VI ---- 203-27
Stuiver, Minze, Deevey, E. S., Jr., and Rouse, Irving. Yale natural radiocarbon measurements VIII ---- 203-39
See also Deevey, E. S., Jr.
Stupak, N. K. An analytical method of separating anomalies ---- 198-277
Stupak, N. K., and Golizdra, G. Ya. Reduction of two-dimensional magnetic and gravity anomalies to a single level ---- 199-160
Stupnikova, N. I., Zykov, S. I., and Mineyev, D. A. Age of rocks of the central and southern Urals according to data of the lead isotope method ---- 192-10
Stussi, J.-M. Study of the radioactivity of the rocks of the drainage basin and of the gravels of the Grandrupt River (Vosges) ---- 193-309
See also Coppens, René.
Subbotin, S. I. On the causes of tectonic movement and magmatism ---- 199-148
Subrahmanyam, Y. See Balakrishna, S., and Ramana, Y. V.
Suess, H. E. See Hubbs, C. L.
Sugai, Kanji. See Sato, Yoshiaki.
Sugawara, A., and Yoshizawa, Y. An investigation on the thermal conductivity of porous materials and its application to porous rock ---- 197-214
Sugimura, Arata; Matsuda, Tokihiko; Chinzei, Kiyotaka; and Nakamura, Kazuaki. Quantitative distribution of late Cenozoic volcanic materials in Japan ---- 203-344
Sugiura Masahisa. A note on the DS variation of geomagnetic storms: A critical examination of method of analysis ---- 194-266
See also Wilson, C. R.

Abstract

Sukharev, G. M., Taranukha, Yu. K., and Vlasova, S. P. Geothermal features of the oil and gas fields of the Caucasus ------- 199-187
—— New data on the geothermal features of the oil and gas fields of the Caucasus -- 197-215
Sukharina, A. N., and Rubakha, F. I. An efficient combination of geophysical operations in prospecting for phosphorites (from experience studying the Gornaya Shoriya phosphorite-bearing area) -- 200-165
Sukhodol'skiy, V. V. See Karapetyan, B. K.
Sultanov, D. D. See Kogan, S. D.
Sultanova, Z. Z. See Bagdasarova, A. M., and Vvedenskaya, N. A.
Šumi, Franć. Geophysical investigations on chromite deposits----- 192-149
Summer, C. J. See Collins, B. G.
Sundukova, G. D. See Alekseyev, F. A.
Sungurov, A. M. See Kornev, V. A.
Surkov, V. S. Deep subsurface geology of the Yuzhno-Minusin depression according to geophysical data ------------------------ 198-343
Sutton, G. H., Neidell, N. S., and Kovach, R. L. Theoretical tides on a rigid, spherical Moon ----------------------------- 202-39
Sutton, G. H., and Pomeroy, P. W. Analog analyses of seismograms recorded on magnetic tape ---------------------------- 200-104
See also Espinosa, A. F.
Sutton, J. Long-term cycles in the evolution of the continents ----- 201-173
Suyama, Junji. See Baba, Kenzo.
Suzuki, Takashi. See Nakamura, Hisayoshi.
Suzuki, Tomisaburo. See Kanai, Kiyoshi.
Suzuki, Ziro, and Kawai, H. I. Model experiments on flexural waves within a plate of varying thickness in the direction perpendicular to the path -- 196-161
See also Asada, Toshi.
Svarichevskaya, Z. A. Recent tectonics of central Kazakhstan----- 195-168
Svec, H. J., Flesch, G. D., and Capellen, J. The absolute abundance of the chromium isotopes in some secondary minerals ---- 197-229
Svelto, O. See Faini, G.
Sveshnikov, G. B. On the factors determining the generation of a natural electrical field on sulfide deposits --------------------- 194-172
Svetov, B. S. Procedures of relative measurements of the magnetic field by the inductive method of surveying ------------------- 200-128
Sviyazheninov, F. I. See Petrovskiy, A. D., and Semenov, A. S.
Svyatlovskiy, A. Ye. Main stages in the tecto-volcanic history of Kamchatka and the problem of uniformitarianism in paleovolcanological researches -- 202-322
—— Volcanism, tectonics, and the problem of actualism----------- 202-126
Swartz, J. H. Some physical constants for the Marshall Islands area -- 192-165
Swift, Gilbert. See Stick, J. C., Jr.
Swithinbank, C. W. Ice movement of valley glaciers flowing into the Ross Ice Shelf, Antarctica -------------------------------- 203-186
Sychev, P. M. On the thickness of the Tertiary formations of Sakhalin Island in the light of the data of geophysical investigations- 193-342
Sykes, Lynn, Landisman, Mark, and Sato, Yasuo. Mantle shear wave velocities determined from oceanic Love and Rayleigh wave dispersion -- 194-102
Syono, Yasuhiko, Akimoto, Syun-Iti, and Nagata, Takesi. Remanent magnetization of ferromagnetic single crystal ------------- 200-274
See also Ishikawa, Yoshikazu.
Syun, K.-K. Calculation of the effect of inhomogeneity of the sources of anomalies observed in working with low frequency induction methods of electrical exploration ---------------------- 196-183
Szabadváry, László. See Ádám, Antal.

Abstract

Szabo, Bela. Application of the gravimetric method for a world geodetic system ---- 192-177
—— Comparison of the deflection of the vertical components computed by astro-geodetic, gravimetric, and topographic-isostatic techniques ---- 192-200
Szasz, Stephen. Comments on the discussion by A. T. Dennison ---- 201-326
Szczepankiewicz, S. See Dumanowski, B.
Szemerédy, Pal. See Forrás, Andras.

T

Taanila, P. A profile calculation method in seismic refraction surveys based on the use of the effective vertical velocity ---- 203-315
Tabulevich, V. N. On the seismicity of the city of Makhachkala ---- 197-80
Tafeyev, G. P. On the compensation of magnetic interferences of the carborne magnetometer ---- 194-286
Tagay, Ye. D., and Ivanova, N. I. Attempt to use reflected waves for investigation of the deep structure of the Earth's crust ---- 194-352
Taggart, James. See Herrin, Eugene.
Tajima, Hirokazu. See Jitsukawa, Akira.
Takada, T., and Kawai, Naoto. Magnetism in ultra fine oxide particles ---- 197-259
Takagi, Akio. Seismic model study ---- 201-338
See also Kato, Yoshio.
Takahashi, Hyoichi. Reconnaissance radiometric survey in the Waga district, Iwate Prefecture ---- 198-300
Takahasi, Ryutaro, and Hatori, Tokutaro. A model experiment on the tsunami generation from a bottom deformation area of elliptic shape ---- 200-96
—— On the tsunami which accompanied the Hiuganada earthquake of February 17, 1961 ---- 195-77
—— The ERI-II type seismoscope ---- 203-110
Takahashi, Toshimasa. See Katsui, Yoshio.
Takano, Kei. See Matuzawa, Takeo.
Takaya, K. Investigations of seismic regions in and near Hokkaido using the observational data at Muroran ---- 202-59
Takehisa, Yoshihiko. See Nakano, Takamasa.
Takei, W. J. See Cox, D. E.
Takenouchi, Sukune. Study of temperatures of mineral formation in hydrothermal ore deposits by the liquid inclusion methods- with reference to the comparison of the heating-stage method, the decrepitation method and the decrepitoscope method ---- 195-211
Takeuchi, Hitoshi. Author's reply [to comments on "Time scales of isostatic compensations"] ---- 202-116
—— Time scales of isostatic compensations ---- 199-139
Takeuchi, Hitoshi; Kanamori, Hiroo; and Saito, Masanori. Absence of spectral peaks in short-period oscillations from the Chilean earthquake ---- 203-101
Takeuchi, Hitoshi, and Saito, Masanori. On the Jeffreys' model of the Earth crust and mantle ---- 201-101
Takeuchi, Hitoshi; Saito, Masanori; and Kobayashi, Naota. A computer program for studying free oscillations of heterogeneous elastic spheres and surface wave propagations along a free surface of semi-infinite heterogeneous elastic media ---- 195-88
—— Rigidity of the Earth's core and fundamental oscillations of the Earth ---- 196-268
Takeuchi, Hitoshi; Saito, Masanori; Kobayashi, Naota; and Nakagawa, Ichiro. Free oscillations of the Earth observed on gravimeters ---- 200-98
Takeyama, I. A. A transistorized amplifier for seismographs ---- 202-70

Abstract

Talley, H. C., Jr., and Cloud, W. K. United States earthquakes 1960 ---------- 198-54

Talwani, Manik. Exact expression for the gravitational attraction of a circular lamina at all points of space and of a right circular vertical cylinder at points external to it ---------- 195-190

—— Gravity measurements on HMS Acheron in South Atlantic and Indian Oceans ---------- 192-233

Talwani, Manik, Heezen, B. C., and Worzel, J. L. Gravity anomalies, physiography, and crustal structure of the Mid-Atlantic Ridge ---------- 198-183

Tamaki, Ituo. Seismicity in relation to the crust structure, with special reference to Japanese area ---------- 196-116

Tamers, M. A. Low concentration of tritium in iron meteorites --- 197-49

Tamrazyan, G. P. On the presence of pulsations of the Earth coupled in time with solar activity ---------- 196-140

—— Spatial-temporal interrelation of the activity of volcanoes, as one of the indications of the presence of a deep fracture, and some problems of its periodicity ---------- 202-353

Tanaka, Teiji. Period distribution analyzer for irregular motions - 200-92

—— Some equipments used in microtremor measurement ---------- 196-132

Tanaka, Yutaka. Contingency of the occurrence of earthquakes in earthquake swarms ---------- 193-85

—— Earthquakes near and volcanic activities of Volcano Nasusan --- 202-357

Taneda, Sadakatu. "Chilie Tsunami" in the Okinawa Islands ------ 194-81

—— Frequency distribution and average chemical composition of the volcanic rocks in Japan ---------- 202-359

—— Petrochemical studies on the active volcanoes in Eastern and Southeastern Asia ---------- 203-354

—— Petrochemical studies on the active volcanoes in Japan -------- 202-358

Taner, Dogan. On the structure of the Earth's crust in Greece, in the Aegean Sea and the near the west coast of Turkey ---------- 195-213

Tanner, J. G. General characteristics of the gravity field in west central Quebec with maps ---------- 199-173

Tarakanov, R. Z. See Kondorskay, N. V.

Taranov, V. A. The dependence of gravity anomalies on height in deriving the mean gravimetric characteristics of large areas---- 196-231

Taranukha, Yu. K. Geothermal features of the Meso-Cenozoic formations of the Kuban-Black Sea oil and gas district ---------- 193-236

See also Sukhanarev, G. M.

Tarasov, G. A. Electrical field over a group of vertically polarized conducting spheres ---------- 194-126

—— On the effect of the earth-air boundary on the electrical field of a polarized sphere ---------- 197-140

Tarass, Nasser. Geophysical investigations in the region of Krynki and interpretation of their results ---------- 194-288

Tarass, Nasser, and Stajniak, Jósef. Unusual aspects of geoelectrical survey at Mrzygłod near Zawiercie ---------- 194-140

Tárczy-Hornoch, Antal. On the determination of the plane best fitting a set of directions determined from earthquakes ---------- 197-85

—— Reply to the comments of Messrs. Ullmann and Maaz ---------- 198-327

Tarkhov, A. G. Electrical prospecting by the radiokip method----- 195-110

—— On the present status of mining geophysics ---------- 202-98

—— On the problem of application of information theory to exploration geophysics ---------- 195-129

—— The present status and prospects of high frequency electrical prospecting ---------- 194-130

See also Dayev, D. S.

Tarling, D. H. Tentative correlation of Samoan and Hawaiian Islands using "reversals" of magnetization ---------- 195-287

Tatevosyan, L. K. Some features of the deep structure of the Earth's crust in the Caucasus according to gravimetric data----- 199-193

Abstract

Tavrin, I. F. Density and magnetic susceptibility of rocks from the western part of the Magnitogorsk synclinorium and eastern part of the Ural-Tau in the Southern Urals ------------------------ 201-276

—— On the procedure for mapping weakly magnetic ultrabasic rocks on the basis of geophysical data ---------------------------- 201-300

Taylor, D. W. See Love, J. D., and Rubin, Meyer.

Taylor, G. A. Seismic tilt phenomena preceding a Pelean type eruption from a basaltic volcano ---------------------------- 203-357

Taylor, H. P., Jr., Albee, A. L., and Epstein, Samuel. O-18/O-16 ratios of coexisting minerals in three assemblages of kyanite-zone pelitic schist ---------------------------------- 202-195

Taylor, H. P., Jr., and Epstein, Samuel. Oxygen isotope studies on the origin of tektites ---------------------------------- 195-24

—— O-18/O-16 ratios in rocks and coexisting minerals of the Shaergaard intrusion, East Greenland ----------------------- 202-196

Taylor, J. G. V., and Merritt, J. S. Branching ratio in the decay of Be^7 -- 192-313

Taylor, J. T. M. Research on ground control and rockbursts on the Kolar gold field, India ---------------------------------- 199-352

Taylor, P. T. See Crowe, Christopher.

Taylor, S. R. Consequences for tektite composition of an origin by meteoritic splash --- 194-50

—— Meteoritic and terrestrial rare earth abundance patterns ------ 194-28

—— The chemical composition of australites -------------------- 194-49

Taylor, S. R., and Sachs, Maureen. Abundance and distribution of alkali elements in Victorian australites --------------------- 196-56

Taylor, S. R., and Solomon, M. Geochemical and geological evidence for the origin of Darwin glass ------------------------ 193-51

Tazieff, Haroun. On the origin of Moon "craters" and the volcanism of the old shields --- 196-83

—— Possibilities offered to volcanology, seismology, and structural geology by the Nils Hast method of measuring the natural stresses existing within rocks in place --------------------------- 195-344

—— Some observations on the seismo-volcanic crisis of May 1960 in central Chile ---------------------------- --------------- 202-319

See also Bordet, Pierre, and Peterschmitt, Elie.

Tazime, Kyozi. A method for expressing displacement potentials of elastic waves by the use of reflection and refraction coefficients --- 201-99

Tazime, Kyozi, and Hamada, Kazuo. Transition from dispersive Rayleigh waves to sound waves in a layer overlying a liquid half space -- 195-89

See also Hamada, Kazuo.

Teikari, P. J. See Riihimaa, J. J.

Teisseyre, Roman. Dynamic and time relations of the dislocation theory of earthquakes ------------------------------------- 193-81

Telyakova, Z. Kh. See Pashutina, S. R.

Temkina, E. A. See Molotova, L. V.

Temnyy, V. V. See Pletnev, V. D.

Tendow, Yoshihiko, and Hashizume, Akira. A sector-type double focusing beta-ray spectrometer ---------------------------- 200-311

engström, Erik. A simplified Rudzki reduction as a convenient method of reducing gravity data for geodetical and geophysical purposes --------------------------- --------------- 192-202

eodorescu, V. See Constantinescu, P.

epley, L. R., and Wentworth, R. C. Hydromagnetic emissions associated with the magnetic storm of September 30, 1961 ------ 201-269

erekhin, Ye. I. See Gasanenko, L. B.

ereshko, D. L. See Ali-Zade, A. A.

er-Karapetyants, Zh. N. See Tsaturyants, A. B.

Abstract

Terpelyak, O. A. See Krylov, S. V.

Terry, S. A. See Agocs, W. B.

Tesi, F. See Norinelli, Armando.

Teupser, Christian. The calibration and testing of electrodynamic seismographs ---------- 196-131

Teupser, Christian, and Ullmann, Wolfgang. A new vertical seismograph with galvanometric recording ---------- 202-69

Teyssier, J.-L., Blanc, Daniel, and Godeau, Alain. Gaseous scintillators: Structure, mechanism, and applications ---------- 200-309

The Papuan Apinaipi Petroleum Company Limited. Boulia area gravity survey, Queensland, 1959 ---------- 194-217

Thiel, E. C. The amount of ice on planet Earth ---------- 202-292

Thiel, Edward. See Behrendt, J. C.

Thode, H. G., Dunford, H. B., and Shima, M. Sulfur isotope abundances in rocks of the Sudbury district and their geologic significance ---------- 192-249

See also Shima, Makoto.

Thomas, C. T. See Rao, K. S. R.

Thomas, H. H. See Faul, Henry, Grantz, Arthur, and Przewlocki, Kazimierz.

Thompson, R. R. See Sackett, W. M.

Thompson, S. O. See Bonner, F. T.

Thompson, W. E. See Barrington, R. E.

Thomsen, H. S. See Duesterhoeft, W. C.

Thorarinsson, Sigurdur, and Sigvaldason, G. E. The eruption of Askja, 1961 ---------- 193-361

Thorpe, A. N., Senftle, F. E., and Cuttitta, Frank. Magnetic and chemical investigations of iron in tektites ---------- 199-42

Thunberg, A. See Hultqvist, Bengt.

Thyer, R. F. Geophysical exploration -- Australia ---------- 199-123

Thyssen-Bornemisza, Stephen, and Stackler, W. F. Discussion on "Terrain correction tables for gravity" by John L. Bible ---------- 203-192

—— The average horizontal gravity gradient ---------- 195-187

T'ien, Ko-Ch'in. See Liu, Kuo-Chien.

Tikhomirova, N. L. See Belen'kiy, B. V.

Tikhonov, A. N., and Enenshteyn, B. S. On a way of determining the depth of the crystalline foundation basement from the phase curves of electromagnetic frequency sounding ---------- 196-181

Tilles, David. See DeFelice, J.

Tilley, C. E. See Yoder, H. S., Jr.

Tillotson, Ernest. Earthquake swarm in Chile beginning in May 1960 ---------- 192-47

Tilton, G. R., Davis, G. L., Hart, S. R., and Aldrich, L. T. The ages of rocks and minerals ---------- 198-5

Tilton, G. R., and Hart, S. R. Geochronology ---------- 202-1

Tilton, G. R., Wetherill, G. W., and Davis, G. L. Mineral ages from the Wichita and Arbuckle Mountains, Oklahoma, and the St. Francis Mountains, Missouri ---------- 194-6

See also Aldrich, L. T.

Timarev, K. V. See Donabedov, A. T.

Timofeyeva, N. M. Investigations of tectonic dislocations by seismic methods ---------- 198-340

Timoshin, Yu. V. On the methodology of investigating diffracted waves ---------- 198-317

—— Traveltime curves of reflected waves in the case of linear sources of arbitrary shape and their interpretation ---------- 200-328

Tipper, H. W. Topley intrusions ---------- 198-14

Titley, S. R., and Damon, P. E. Investigation of color centers in fluorite with application to geologic time ---------- 194-4

Titlinov, V. S. See Astrakhantsev, G. V.

Abstract

Tivadar, Groholy. Recent results of the seismic exploration in Hungary ---------- 198-336

Tobyáš, Vladimir. The influence of the galvanometer reaction on the equivalent constants of electromagnetic seismographs ---------- 198-82
See also Kárník, Vít.

Togliatti, V. See Gonfiantini, R.

Tokarev, P. I. Seismic observations at the Kamchatka volcanological station in 1958 ---------- 197-69

Tokarev, V. A. Absolute age of rocks of the Kolm"yavr-Voron'ya zone and the genetic relationship of its pegmatites to the granites ---------- 202-20

Toksőz, M. N., and Anderson, D. L. Generalized two-dimensional model seismology with application to anisotropic earth models---------- 197-125

Toksőz, M. N., and Ben-Menahem, Ari. Velocities of mantle Love and Rayleigh waves over multiple paths ---------- 203-227
See also Anderson, D. L.

Tolozko, L. R. See MacKallor, J. A.

Tolpadi, S. K. See Singh, R. N.

Tolstoy, M. I. Use of the results of radiometric investigations in metallogenetic prediction ---------- 199-289

Tomaschek, Rudolf. Contributions of earth tide research to seismic problems ---------- 193-102

Tomashevskaya, I. S. See Volarovich, M. P.

Tomkeieff, S. I. Palaeomagnetic studies in the U.S.S.R ---------- 198-262

Tommasi, G. C. Application of the tiltmeter for survelliance of the activity of Etna ---------- 202-339

Tomoda, Yoshibumi, and Kanamori, Hiroo. Tokyo surface ship gravity meter ---------- 200-208

Tonani, F. See Facca, G.

Tongiorgi, Ezio. See Cervenjak, Z., d'Albissin, Micheline, Eberhardt, Peter, Fontes, J. C., and Gonfiantini, R.

Tooker, E. W. See Mabey, D. R.

Tooley, R. D. See Stephenson, L. P.

Toporets, S. A. On the dependence of the electrical conductivity of coals of the southern Maritime Territory on geologic factors ---------- 193-152

Touitou, J. See Launay, L.

Toulouse, Gerard. On the secular variation of the geomagnetic field ---------- 194-251

Trautman, M. A. Isotopes, Inc. radiocarbon measurements III---------- 203-26

Trebukova, B. D. Results of work by the method of deep seismic sounding on land in the Azerbaijan SSR ---------- 194-345

Treskov, A. A. On teleseismic determinations of the Earth's crust thickness ---------- 198-193

Treskov, A. A., and Misharina, L. A. Kyrensk earthquake of August 10, 1958 ---------- 198-59

Treskov, A. A., and Pshennikov, K. V. Seismicity of the Baikal zone ---------- 192-75
See also Masarskiy, S. I., and Solonenko, V. P.

Treskova, Yu. A. See Krylov, S. V.

Triaca, Ugo. Rapid method of radiometric prospecting underground ---------- 193-315

Trigubov, A. V. Mixing by the regulated directional rception (RDR) method of records of seismic waves with nonrectilinear cophasal axes ---------- 197-332
— On a comparative appraisal of the accuracy of the methods of longitudinal and converted refracted waves ---------- 202-267

Trigubov, A. V., and Ryabinkin, L. A. Peculiarities of summed tapes of regulated directional reception (RDR) with superposed low-velocity, intense wave interference ---------- 197-335
See also Voronin, Yu. A.

Abstract

Tripol'nikov, V. P. See Lin'kov, Ye. M.
Troitskaya, V. A. Continuous oscillations and train oscillations in the Arctic and Antarctic -- 195-41
— Oscillations of the beat type (beads) in the Earth's electromagnetic field (T~1-4 sec) -- 194-271
Troitskaya, V. A., and Mel'nikova, M. V. On the characteristic intervals of oscillations diminishing within a period of 10-1 sec in the electromagnetic field of the Earth, and their relation to the phenomena in the upper atmosphere -------------- ---------- 194-272
Troitskiy, S. G., and Shashkin, V. L. Apropos of the communication of L. S. Polak, Ye. M. Filippov, G. A., Kuznetsov, and V. Ya. Zhavoronkov "Investigation of the spectrum of diffuse gamma-radiation as applied to the solution of certain problems of geophysics" -- 198-303
See also Lebedev, A. M.
Troitskiy, V. S. Nature and physical state of the outer shell of the Moon -- 196-60
— Radiowave measurement of dielectric permeability and density of material of the upper cover of the Moon-------------------- 194-61
See also Krotikov, V. D.
Trorey, A. W. Theoretical seismograms with frequency and depth dependent absorption -- 194-303
Trubitsyn, V. P. See Kalinin, V. A., and Yegorov, N. N.
Trudu, Renato. Gravity survey of Sardinia -------------------- 193-229
— On the derivative function of the field in gravimetric and magnetic interpretation -- 203-195
— Pressure study of the North American gravimeter AGI N. 125-- 203-202
Trumpy, B. Magnetic and cosmic ray storms------------------ 197-249
Tryggvason, Eysteinn. Wave velocity in the upper mantle below the Arctic-Atlantic Ocean and northwest Europe ------------------ 193-253
See also Båth, Markus.
Trzhtsinskiy, Yu. B. Use of electrical prospecting methods in the study of landslip features ---------------------------------- 194-144
Tsaturyants, A. B., and Ter-Karapetyants, Zh. N. On the probable cause of variations of the geothermal step with depth ------- 196-250
Tseng, C. S., Ho, C. D., and Kan, J. C. Refracted waves and multiple waves in Chaitamu Basin by low-frequency seismic refraction method-- 199-349
Tsimel'zon, I. O. Geological interpretation of local gravity anomalies in the Apsheron region and adjacent parts of the Caspian area- 196-241
Tsirul'skiy, A. V. On the problem of the uniqueness of the solution of the inverse problem of potential theory ------------------ 201-161
Tskhakaya, A. D. Seismicity of the Dzhavakhetskiy (Alkalkalaki) upland -- 192-65
See also Byus, Ye. I., and Vvedenskaya, N. A.
Tsuboi, Chuji. Relationship between magnitude and frequency of earthquakes in Japan and vicinity -------------------------- 203-74
Tsujiura, Masaru. A pen-writing long-period seismograph, Pts. 1 and 2 -- ------ 200-106
See also Miyamura, Setumi.
Tsukernik, V. B., Frolov, A. I., and Stroyev, P. A. Seismic and gravity investigations of the western ice shelf in Antarctica ----- 203-325
Tsuya, Hiromichi, and Morimoto, Ryohei. Types of volcanic eruptions in Japan ------- -------------- -------------------- 203-342
Tsykhan, A. I. See Mikhaylovskiy, V. N.
Tubina, L. A. See Mikhaylova, N. P.
Tugarinov, A. I., Zykov, S. I., and Bibikova, Ye. V. On the determination of the absolute age of sedimentary rocks by the lead-uranium method -- 200-4
See also Vinogradov, A. P., and Zhirova, V. V.

Abstract

Tulin, V. A. Experiment in construction of a field thermostat using mercury contact thermometers 193-214
Tulina, Yu. V. See Aver'yanov, A. G., Gal'perin, Ye. I., Kosminskaya, I. P., and Veytsman, P. S.
Tullis, E. L. See Agnew, A. F.
Tul'skiy, A. S. See Plekhanov, G. F.
Tuman, V. S. Reply to discussion by J. Geertsma on "Refraction and reflection of sonic energy in velocity logging" 194-305
—— Thermal stresses around a wellbore and their small effect on velocity logging 195-321
—— Thermo-telluric currents generated by an underground explosion and other geological phenomena 200-124
Tumilovich, N. I. Interpretation of borehole seismic survey data on the South Emba domes 201-350
Tupitsyn, N. V. Principles of the tectonics of China 200-195
Turchaninov, L. V. See Semenov, A. S.
Turf, J. The continuous measurement of the natural radioactivity of the air 203-306
Turitsyn, K. S. Physical properties of rocks of the framework of the southern part of the Siberian platform 195-282
Turnbull, A. H. See Olsson, I. U.
Turner, F. J. See Griggs, D. T.
Turner, Geoffrey. A catalog of measured heights in the Regiomontanus and Hell Plain regions of the Moon 196-81
—— Errors involved in the photographic determinations of lunar heights and a preliminary study of the region of Ptolemaeus and Alphonsus 196-76
—— Measured heights of lunar mountains in the southeastern part of Mare Tranquilitatis 196-79
—— Measurements of the heights of the walls of the Crater Archimedes 196-80
Turner, M. D. See Angino, E. E.
Turski, Wladyslaw. On the origin of lunar maria 193-54
Tuve, M. A. Cooperative geophysics in the Andes 201-163
See also Steinhart, J. S.
Tuyezov, I. K. See Pashutina, S. R.
Tvaltvadze, G. K. Study of the Earth's crust structure on the basis of evidence from near earthquakes 198-192
Tverskoy, B. A. Convection in a rotating sphere. Pt. 1 203-234
—— Convection in a rotating sphere. Pt. 2 203-235
—— The magnetohydrodynamic properties of two-dimensional turbulence in a rotating sphere 203-236
Tyapkin, K. F. Choice of the limits of integration in reducing three-dimensional anomalies to a plane 193-210
—— Determination of the common slope angle of the upper surface of steeply dipping layers from gravity measurements 194-206
—— Determination of the position of the upper boundary of a body extended infinitely in depth from results of measurement of the gravity potential 194-205
Tyapkin, K. F., and Kharchenko, S. P. On the possibility of determining the upper and lower boundaries of geologic objects according to the results of gravity observations over contacts 199-150
See Golizdra, G. Ya.
Tyson, N. S. See Anderson, L. A., Blanchett, Jean, Bromery, R. W., and Henderson, J. R., Jr.
Tyurin, M. N. See Nikolayevskiy, A. A.
Tyurmin, A. V. See Nalivayko, V. I.
Tyurmina, L. O. See Dolginov, S. Sh.

U

Abstract

Ubisch, H. von. See Wickman, F. E.
Udias, Agustin. See Stauder, William.
Uffen, R. J. Influence of the Earth's core on the origin and evolution of life ---- 199-215
—— The Canadian Scientific Committee for the Upper Mantle Project ---- 193-252
Uffen, R. J., and Jessop, A. M. The stress release hypothesis of magma formation ---- 203-333
Ulizlo, B. M. Methods of constructing paleogeologic maps on the basis of geophysical well logging data ---- 193-147
Ullmann, Wolfgang, and Maaz, R. Comments on the contribution "On the localization of seismic focuses in mining districts by Tárczy-Hornoch ---- 198-327
See also Teupser, Christian.
Ulomov, V. I. Results of investigation of deep crustal structure in central Asia according to seismic data ---- 196-263
See also Butovskaya, Ye. M.
U. S. Coast and Geodetic Survey. Magnetograms and hourly values, Fredericksburg, Virginia, 1960 ---- 194-244
—— Magnetograms and hourly values, Tucson, Arizona, 1960 ---- 200-252
Untiedt, Jürgen. Linear deflections of the geomagnetic horizontal vector according to Göttingen direct-recorded vectograms ---- 194-255
—— The secular variation of geomagnetism ---- 192-259
Unz, M. Relative resolving power of four-point resistivity configurations ---- 201-118
Uotila, U. A. K. Harmonic analysis of world-wide gravity material ---- 198-165
Urazayev, B. M. See Al'mukhanbetov, D.
Urbain, Pierre. See Geslin, Marcel.
Urey, H. C. Cometary collisions and tektites ---- 196-58
—— Evidence regarding the origin of the Earth ---- 194-24
—— Lines of evidence in regard to the composition of the Moon ---- 193-52
—— Origin of tektites ---- 192-33
See also Murthy, V. R.
Urupov, A. K. On the adjustment of data in studying horizontal variations in average velocity according to the traveltime curves of reflected waves ---- 200-329
—— Some data on phase distortions in the case of grouping of geophones on large bases ---- 200-326
Urusov, V. S. See Zhirov, K. K.
Us, Ye. M. Estimation of the oil potential of the fractured reservoirs of the Miocene formations of the western Kuban ---- 199-110
Usami, Tatsuo. Some remarks on the solutions of the equation of motion for a homogeneous and isotropic elastic medium. Especially on the uniqueness of the solution for boundary value problems in an infinite elastic medium ---- 202-84
Usami, Tatsuo, Kano, Kyoichi, and Sato, Yasuo. Some remarks on the solutions of the equation of motion in an isotropic and homogeneous elastic body (II). Relations between various solutions of rotational type ---- 201-102
See also Sato, Yasuo.
Usenko, A. I. Procedure of prospecting for and exploring contact-metasomatic iron ore deposits in the Northern Urals ---- 200-298
Usenko, D. N. See Stovas, M. V.
Ushakov, S. A. On the relationship of the gravitational field to the geologic structure of the explored areas of Antarctica ---- 196-245
Usher, M. J. Elastic behaviour of rocks at low frequencies ---- 196-163
Ustinov, V. I. See Vinogradov, A. P.

Abstract

Ustiyev, Ye. K. Anyuy Volcano 203-340

—— The Okhotsk volcanic belt and related problems 202-137

Utech, Karl. The concentration of cosmic spherules in sediments as a criterion for the rate of formation 201-43

Utegenov, S. M. Problem of determining the content of potassium and magnesium in halogen deposits by gamma logging 201-323

Utkin, V. I., and Burdin, Yu. B. Two channel borehole γ-spectrometer 202-265

Utzmann, René. See Picou, Claude.

Uyeda, Seiya, Fuller, M. D., Belshé, J. C., and Birdler, R. W. Anisotropy of magnetic susceptibility of rocks and minerals 194-273

Uyeda, Seiya, and Horai, Ki-iti. Studies of the thermal state of the Earth. The eight paper: Terrestrial heat flow measurements in Kanto and Chubu districts, Japan 203-219

—— Studies of the thermal state of the Earth. The ninth paper: Terrestrial heat flow measurements in Kinki, Chugoku and Shikoku districts, Japan 203-220

See also Horai, Ki-iti, Rikitake, Tsuneji, and Von Herzen, R. P.

Uzumasa, Yasumitsu. See Kayama, Izao.

V

Vachette, Michelle. See Gazel, Jacques.

Valdner, N. G. See Savarenskiy, Ye. F.

Van Allen, J. A. See Frank, L. A., and Freeman, J. W.

Vand, Vladimir. Lunar dust and terrestrial ice nucleus concentration 199-46

—— The meteoritic craters of Ries Kessel and Steinheim Basin and their relation to tektites 201-45

Vander Elst, N. Geophysical research in the Congo 192-161

Vaněk, Jíři, and Stelzner, Johannes. Amplitude curves of seismic body waves 194-86

—— The problem of magnitude calibrating functions for body waves 192-85

Vaněk, Jíři, and Waniek, Ludvík. Pressure wave amplitudes in and near the shattered zone of an underground explosion measured by piezophotographic method 192-108

Van Horn, Hugh. See Hapke, B. W.

Van Melle, F. A., Faass, D. L., Kaufman, S., Postma, G. W., and Seriff, A. J. Geophysical research and progress in exploration 201-162

Van Reenan, E. D. A complete sonar thumper seismic system 192-333

Van Rooyen, H. O. See Gledhill, J. A.

Van Sandt, D. R., and Levin, F. K. A study of cased and open holes for deep-hole seismic detection 200-334

Van Voorhis, G. D. See Alldredge, L. R.

Van Wijk, A. M., and Bergh, H. W. Preliminary investigation into the lunar semidiurnal variation in the magnetic elements at Cape Town and Hermanus 198-234

Van'yan, L. L. A new method of determining the electromagnetic field of a dipole grounded on the surface of a multilayered isotropic medium 202-95

Van'yan, L. L., Morozova, G. M. Templates for the interpretation of the transient of a magnetic field 196-182

Van'yan, L. L., Morozova, G. M., and Lozhenitsyna, L. V. On the calculation of the theoretical curves of electrical sounding 201-123

—— Theoretical curves of the method of induced polarization 198-109

Vargo, J. L. See Andreasen, G. E., Bromery, R. W., and Henderson, J. R., Jr.

Vartanov, S. P. Additional possibilities of the geologic interpretation of seismic reflection surveys under marine conditions 199-310

Abstract

Vartanov, S. P. First experiment in marine seismic surveying in the Polar region ---------- 197-345

Vasilenko, V. K., and Levchenko, I. G. Research drill holes of the USSR. Zaysan research drill hole (Vostochno-Kazakhstan Region) ---------- 196-192

Vasilenko, V. N. See Balyasnyy, N. D., and Boltneva, L. I.

Vasilevskis, J. See Schmitt, R. A.

Vasiliu, I., and Solomon, A. Seismometric research in the Galaţi region ---------- 201-347

Vasil'kovskiy, N. P. On debatable problems of the development of the Earth's globe and tectogenesis ---------- 193-172

Vasil'yev, N. V. See Plekhanov, G. F.

Vasil'yev, R. T. Investigation of errors arising in observations of base networks in aeromagnetic surveying ---------- 200-286

Vasil'yev, Yu. A. Graphic-analytic method of solving three-dimensional problems of seismic surveying by the method of reflected waves ---------- 199-308

—— Solution of the direct spatial problem of seismic prospecting by the reflected-wave method in the case of a linear source of oscillations ---------- 201-328

Vasil'yev, Yu. F. See Ivakin, B. N.

Vasil'yev, Yu. I., and Gurevich, G. I. Relationship between the decrements of attenuation and the velocity of propagation of longitudinal and transverse waves ---------- 200-112

Vasil'yev, Yu. I., Ivanova, T. G., Kovalev, O. I., and Molotova, L. V. On low-frequency seismic surveying ---------- 194-319

Vasil'yev, Yu. M. See Arabadzhi, M. S.

Vasil'yeva, M. A., and Vlasov, I. I. Some problems of constructing the composite map of magnetic anomalies of the USSR on a 1:1,000,000 scale ---------- 199-270

Vaughn, S. K. See Calvin, Melvin.

Vdovykin, G. P., and Pomortseva, N. V. New data on the nature of the organic constituents of carbonaceous chondrites ---------- 199-32

Vees, R. See Rosenbach, Otto.

Veis, George, and Whipple, F. L. Experience in precision optical tracking of satellites for geodesy ---------- 193-167

Veksler, V. I. See Semenov, A. S.

Velikin, A. B., and Grantov, G. S. The electromagnetic fields used in induction methods of electrical surveying ---------- 202-96

Vendel'shteyn, B. Yu. Certain factors of diffusion-adsorption potentials of rocks ---------- 197-151

—— Concerning the relation between the parameter of porosity, the coefficient of surface conductivity, the diffusion-adsorption activity, and the adsorption properties in clastic rocks ---------- 197-149

Venedikov, A. P. Application of the least squares method to the harmonic analysis of earth tide observations ---------- 196-134

Vening Meinesz, F. A. Continental and ocean-floor topography; mantle convection currents ---------- 198-210

—— Pattern of convection-currents in the the Earth's mantle ---------- 195-142

—— Pseudo-viscous shear zones in the Earth's crust, three possible systems of mutual reaction of large crustal blocks ---------- 195-143

—— Relative movements of continents ---------- 201-177

—— Stokes' theorem and isostatic anomalies, indirect reduction ---------- 192-170

—— Two types of deep ocean trenches ---------- 200-192

—— Volcanicity cause of equilibrium disturbances of the geoid ---------- 200-358

Venkatasubramanian, V. S., and Krishnan, R. S. Radioactivity and geochronology of igneous and metamorphic rocks of the Precambrian era of the Indian Peninsula ---------- 200-45

Venkatesan, D. See Akasofu, S.-I.

Verbaandert, J. The calibration of horizontal pendulums ---------- 196-234

Abstract

Verbitskiy, T. Z. See Petkevich, G. I.
Vergilov, V. See Yordanov, N.
Verhoogen, J. See Currie, R. G.
Verő, Jósef. Determination of the telluric station ellipse 198-52
 See also Ádám, Antal.
Veselovskiy, N. V. See Skripchenko, N. S.
Veshev, A. V. Effect of inhomogeneities of rocks on the results of electrical profiling 199-90
—— On the presentation of results of observations in electrical surveying by alternating currents in the form of apparent specific electrical resistivity 197-136
—— The effect of the inhomogeneity of rocks on electrical profiling 194-124
Veshev, A. V., and Ivochkin, V. G. Electrical profiling with the induction apparatus "Zemlya-2" 197-145
 See also Bulgakov, Yu. I.
Vestine, E. H. Solar influences on geomagnetic and related phenomena 203-241
—— World Magnetic Survey (introductory remarks) 192-251
Vetchinkin, A. N. Electronic seismographs with a capacitance pickup 198-329
Vetrov, A. G. A means of approximately calculating the gamma field in surface mine workings 194-299
—— Radiometric determination of uranium in four-component samples 194-297
Vetshteyn, V. Ye. See Burkser, Ye. S.
Veytsman, B. A. Use of apparent velocity for determination of effective velocity from reflected wave traveltime curves 199-321
Veytsman, P. S., Gal'perin, Ye. I., Kosminskaya, I. P., Vol'vovskiy, B. S., Godin, Yu. N., Ivanova, N. P., and Pomerantseva, I. V. Methodology of deep seismic sounding on land and at sea 194-313
Veytsman, P. S., Kosminskaya, I. P., Mikhota, G. G., and Tulina, Yu. V. Fundamental characteristics of seismic waves in the areas of the northern Tien Shan, Pamir-Alay, and southwestern Turkmenia 194-337
 See also Aver'yanov, A. G., Gal'perin, Ye. I., and Kosminskaya, I. P.
Vialette, Yves. Contribution to the geochronological study by the strontium method of the principal massifs of granites and of migmatites of the French Massif Central 194-15
 See also Bonhomme, Michel, and Despois, Jacques.
Vicente, R. O. The dependence of earth tides on the structure of the core of the Earth 202-75
—— The elasticity of the Earth's outer core (1) 202-76
Vigdorovich, D. A., Zivert, R. R., and Ryss, Yu. S. Development of an efficient combination of methods of prospecting for polymetallic deposits in regions with a great thickness of unconsolidated formations 196-198
—— Results of the use of borehole geochemical and geophysical methods of prospecting for deposits of polymetallic ores, exemplified by the Rudniy Altay 200-152
Viksne, Andris, Berg, J. W., Jr., and Cook, K. L. Reply by authors to discussion by L. P. Stephenson and R. D. Tooley "Effects of porosity, grain contacts, and cement on compressional wave velocity through synthetic sandstones" 195-93
Vinnik, L. P. Space-time filtration of a seismic signal 203-105
Vinogradov, A. P. On the discussion of the mechanism of emission of radiogenic gases 199-4
—— Origin of the Earth's shells 196-254
Vinogradov, A. P., Devirts, A. L., Dobkina, E. I., and Markova, N. G. Determination of absolute age according to C-14. Part 3 192-3

Abstract

Vinogradov, A. P., Grinenko, V. A., and Ustinov, V. I. Isotopic composition of sulfur compounds in the Black Sea ------------- 196-274
—— Origin of the Pericarpathian sulfur deposits according to the isotopic compositions S-32/S-34 and C-12/C-13--------------- 195-228
Vinogradov, A. P., Lavrukhina, A. K., and Revina, L. D. Nuclear reactions in iron meteorites --------------------------- 196-36
Vinogradov, A. P., and Tugarinov, A. I. Geochronology of the Precambrian -------------- --------------------------- 195-3
—— Problems of geochronology of the Precambrian -------------- 198-24
—— Problems of geochronology of the Precambrian in eastern Asia -- 197-25
—— Problems of Precambrian geochronology-------------------- 199-6
Vinogradov, A. P., Tugarinov, A. I., Zykov, S. P., Knorre, K. G., Sten'ko, V. A., and Lebedev, V. I. On the age of the crystalline rocks of central Europe ------------------------------- 196-21
Vinogradov, P. A. New experimental data on the relative vertical component of short period oscillations of the field of telluric currents --- 198-48
—— Results of the use of geophysics at different stages of prospecting for and exploring chalcopyrite ores in the northern Caucasus --- 200-151
—— Short-period oscillations of the electrotelluric field (observed at Irkutsk) -- 194-248
—— Some statistical regularities during the course of short-period variations of Pc and Pt types of the Earth's electromagnetic field observed during the IGY and IGC at Irkutsk ------------------- 193-283
Vinogradov, S. D. Acoustical observations of rock burst processes in the Anna mine (Czechoslovakia) ---------------------------- 202-297
Vints, B. D. See Pochtarev, V. I.
Visarion, Marius. Contribution of gravimetric prospecting to the determination of halite and potassium salt structures of the Neogene deposits of the eastern Carpathians --------------------- 199-179
—— Major anomaly of the gravimetric field in the locality of Colibiţa -- 201-210
Vishnyakov, Ye. P. A drill of new construction for setting up SPM-16 seismographs-- 199-332
Viste, Elizabeth, and Anders, Edward. Cosmic-ray exposure history of tektites -- 192-31
Vita-Finzi, C. Carbon-14 dating of medieval alluvium in Libya ---- 202-14
Viterbo, Carla. Magnetic survey of the Lagoon of Venice --------- 193-300
Vladimirov, A. T. See Budanov, V. I.
Vladimirov, N. P. Induction magnetic pickups used in the study of the magnetic field of the Earth ------------------------------ 199-218
—— Magnetotelluric method of prospecting --------------------- 198-46
Vladimirov, N. P., and Kleymenova, N. G. Structure of the natural electromagnetic field of the Earth in the range 0.5-100 cycles per second -- 196-99
Vladimirova, V. A. See Korzhev, A. A.
Vlasov, A. Ya. Fifth all-union conference on paleomagnetism ----- 194-281
Vlasov, A. Ya., and Aparin, V. P. Paleomagnetism of the Late Precambrian according to data of the study of the Sinian sediments of the Yenisei Range --------------------------------- 202-228
Vlasov, A. Ya., Bogdanov, A. A., and Zvegintsev, A. G. Temperature variations of magnetic properties of natural hematite--- 201-274
Vlasov, A. Ya., and Kovalenko, G. V. Magnetism of transitional layers between zones of direct and reverse magnetization ------- 202-226
Vlasov, A. Ya., Kovalenko, G. V., and Popova, A. V. Some data on the paleomagnetism of sedimentary rocks of the Lower Carboniferous of the Minusin depression------------------------- 198-265

Abstract

Vlasov, A. Ya., Zvegintsev, A. G., and Bogdanov, A. A. Self-reversal of magnetization in synthetic ilmenite-hematite solid solutions ---------- 201-273

Vlasov, I. I. See Vasil'yeva, M. A.

Vlasova, S. P See Sukharev, G. M.

Vlinov, M. N. See Grumbkov, A. P.

Vlodavets, V. I. International symposium on the prediction of volcanic eruptions and the relationships between magmas and types of eruption ---------- 202-354

—— On the causes producing different evolutions of the composition of the lavas of Malyy Semyachik and Karymskiy volcanoes ---------- 202-325

—— Processes giving rise to pyroclastic material and its initial transport ---------- 202-344

Vlodavets, V. I., Naboko, S. I., and Piyp, B. I. Relations between the type of eruptions and the composition of lava as exemplified by Kamchatka and Kurile volcanoes ---------- 203-341

Vogel, Andreas. Demagnetizing fields of inhomogeneous induced magnetization ---------- 195-275

—— On a method for estimating the shape of a gravitationally and magnetically disturbing body ---------- 196-300

—— The application of electronic computers to the calculation of effective magnetization ---------- 199-254

Vogel, J. C., and Waterbolk, H. T. Groningen radiocarbon dates IV ---------- 203-31

See also Jacobshagen, V.

Vogelsang, Dieter. The relation of fold structures and metamorphism of old iron ore beds to their natural magnetization ---------- 192-293

Volarovich, M. P. Investigation of the physical-mechanical properties of rocks at different pressures ---------- 196-344

Volarovich, M. P., Balashov, D. B., Tomashevskaya, I. S., and Pavolgradskiy, V. A. Investigations of elastic wave velocities in rock samples under the joint action of hydrostatic pressure and uniaxial stress ---------- 201-111

Volcanological Society of Japan. Bulletin of Volcanic Eruptions no. 1 ---------- 193-358

Volchek, V. S. Procedure of geophysical investigations in the exploration of mica deposits ---------- 200-136

Vol'fshteyn, P. M., Sayganov, E. A., and Balashev, A. N. Use of the method of selective logging ---------- 192-323

Volk, V. E. See Karasik, A. M.

Volkov, D. M. See Sakharnikov, N. A.

Volochayev, V. Ya. See Artemov, V. R.

Volodarskiy, R. F. Geologic interpretation of regional gravity anomalies in the Amur-Zeya depression ---------- 198-187

Volodarskiy, R. F., and Golomb, V. E. Experience in making gravity surveys in difficulty accessible regions of Siberia with the use of primary reference profiles ---------- 198-188

Vol'vovskiy, B. S. See Belousov, V. G., Godin, Yu. N., Veytsman, P. S., and Vol'vovskiy, I. S.

Vol'vovskiy, I. S., Ryaboy, V. Z., and Shraybman, V. I. Use of the methods of frequency analysis and synthesis for interpretation of the gravity field in the Bukhara-Khiva province ---------- 200-218

Vol'vovskiy, I. S., and Vol'vovskiy, B. S. Character of the wave pattern in investigations by the method of deep seismic sounding in Uzbekistan (Fergana intermontane basin, Bukhara-Khiva region) ---------- 194-339

See also Belousov, V. G., and Godin, Yu. N.

Von Herzen, R. P. Geothermal heat flow in the Gulfs of California and Aden ---------- 200-226

—— Oceanic heat flow data ---------- 202-162

Abstract

Von Herzen, R. P., Maxwell, A. E., and Snodgrass, J. M. Measurement of heat flow through the ocean floor ---- 201-216

Von Herzen, R. P., and Uyeda, Seiya. Heat flow through the eastern Pacific Ocean floor ---- 202-161

von Huene, Roland. See Caputo, Michele.

Voronin, Yu. A., Nikol'skiy, E. V., and Trigubov, A. V. On a way of calculating head waves associated with curvilinear discontinuities ---- 194-99

Vorob'yev, G. G. See Starik, I. Ye.

Voronkov, A. V. Methods of averaging observation points in determining effective velocities in integral form ---- 199-314

Voronkov, O. K. See Shan'gin, N. V.

Voronov, P. S. See Krylov, A. Ya.

Voronovskiy, S. N. See Amirkhanov, Kh. I., and Brandt, S. B.

Vortman, L. J. Cratering experiments with large high-explosive charges ---- 201-116

Voshage, H., and Hinterberger, H. Mass spectrometric measurements of isotopic abundances on potassium from iron meteorites and the problem of determination of the K-41/K-40 exposure age- 193-31

Voskoboynikov, G. M. Spectrum of gamma-radiation of a monochromatic source in a homogeneous scattering medium (numerical data) ---- 201-317

—— The Carleman function and its application to the solution of certain geophysical problems ---- 199-128

Voskoboynikov, G. M., Balashov, V. N., and Glavchev, P. A. On the problem of the quantitative determination of the heavy metal content in ore according to selective logging data ---- 201-320

Voskresenskiy, Yu. N. Determination of frequency and phase characteristics of regulated directional reception (RDR) apparatus ---- 197-333

—— Examples of frequency analysis of regulated directional reception (RDR) data in the Cis-Ural depression of Bashkiria ---- 197-334

See also Ryabinkin, L. A.

Voytkevich, G. V. Problems of radiogeology ---- 193-2

Voytovich, V. S. On the problem of the Paleozoic basement of the Alakul' basin ---- 197-298

Voyutskiy, V. S. A method of recording seismic vibrations with reinforcement of signals ---- 200-327

—— The accumulation method as a means of enhancing the effective sensitivity of apparatus ---- 194-320

Vroman, A. J. On the Red Sea rift problem ---- 200-191

Vsekhsvyatskiy, S. K. Small bodies of the solar system and problems of volcanism of the Earth ---- 194-25

—— The small bodies of the solar system and problems of terrestrial volcanism ---- 202-36

Vuagnat, Marc. See Buch, Armand.

Vukasovíc, Momčilo. See Deleon, Gavrilo.

Vvedenskaya, A. V. See Balakina, L. M.

Vvedenskaya, N. A. Earthquakes of central Asia ---- 192-70

—— Generalization of seismo-statistical data in the seismic regionalization of the territory of central Asia ---- 197-82

Vvedenskaya, N. A., Iodko, V. K., Dzhanuzakov, K. D., Kondorskaya, N. V., Landyreva, N. S., Misharina, L. A., Sultanova, Z. Z., Tskhakaya, A. D., and Yurkevich, O. I. Bulletin of strong earthquakes in the USSR during the year 1959 ---- 197-68

Vyskočil, Vincenc. On the problem of estimating the accuracy of gravimetric maps ---- 200-203

—— The interpretation of gravity anomalies in the case of density variations with depth ---- 198-179

Vysotskaya, V. I. See Bosov, V. D.

W

Abstract

Waalewijn, A. Crustal movements in the Netherlands 194-188
Wacholz, Helmut. On the relation between acoustic velocity and porosity in strata 196-336
Wachsmuth, Gunther, and Schmidt, Edgar. Experience with the reflection seismograph in a mine within a salt-plug 196-334
Wager, L. R. Igneous cumulates from the 1902 eruption of Soufrière, St. Vincent 202-320
Wagg, D. M., and Seigel, H. O. Induced polarization in drill holes 199-102
Wagner, C. U. See Lucke, Otto.
Wagner, F.-W. The Delitzsch magnetic anomaly 192-307
Wait, J. R. A note on the propagation of electromagnetic pulses over the Earth's surface 192-119
Wakai, Noboru. See Ishizawa, Kaoru.
Walker, E. H. See Singer, S. F.
Walker, R. M. See Price, P. B.
Walker, Terry. See Anderson, W. L.
Walter, J. W. R. See Crowell, J. C.
Walthall, F. G. See Hedge, C. E.
Wampler, J. M., and Kulp, J. L. Isotopic composition and concentration of lead in some carbonate rocks 197-4
Wang, Huai-Yin. See Liu, Kuo-Chien.
Waniek, Ludvík. See Vaněk, Jiří.
Wänke, H. See Hinterberger, H.
Wanless, R. K., and Lowdon, J. A. K-Ar age measurements on mineral pairs 198-12
  See also Leech, G. B., and Poole, W. H.
Ward, F. W., Jr., and Shapiro, Ralph. Solar, geomagnetic, and meteorological periodicities 203-245
  See also Macdonald, N. J.
Ward, S. H. Dynamics of the magnetosphere 196-276
  See also Dobrin, M. B., Jewell, T. R., Keevil, N. B., Jr., Somerton, W. H., and Srivastava, S. P.
Warf, J. C. Volcanic eruption in Bali 201-360
Waring, G. A. See White, D. E.
Warner, Brian. A classification of the profiles of lunar craters 196-86
— Accretion and erosion on the surface of the Moon 193-57
— Lunar crater profiles 196-84
— On the lunar grid system 196-68
— On visual estimates of the depths of small lunar craters 203-59
— Project Moonhole 203-58
— Some features of the lunar grid system 196-69
— Some problems of lunar orogeny 196-94
— Stresses in the surface of the Moon 196-73
— The lunar maria 193-53
  See also Fielder, Gilbert.
Warner, S. E. Seismic velocity study 203-142
Warren, C. R. Origin and nature of the probable skeletal fuzz on the Moon 201-48
Warwick, C. S. Delay time of polar-cap blackout and its relation to delay time of geomagnetic disturbance 196-243
Wasserburg, G. J. Diffusion processes in lead-uranium systems 203-2
Wasserburg, G. J., Wetherill, G. W., Silver, L. T., and Flawn, P. T. A study of the ages of the Precambrian of Texas 194-8
  See also Butler, W. A., and Graindor, M.-J.
Wasson, J. T. Radioactivity in interplanetary dust 203-46
Watanabe, Hikaru. A method of determining magnitude of tsunami and its application to tsunami warning 202-65

Abstract

Watanabe, Hikaru. A rotational strain seismometer -------------- 201-86
—— On the sequence of earthquakes (Part 1) -------------------- 201-74
—— On the sequence of earthquakes (Part 2) -------------------- 201-75
Watanabe, T. See Jacobs, J. A.
Waterbolk, H. T. See Vogel, J. C.
Waters, A. C. See Hopkins, C. A.
Watkins, J. S., Jr. Gravity and magnetism of the Ouachita structural belt in central Texas ------------------------------- 193-221
—— Simple Bouguer gravity map of Kentucky -------------------- 200-209
See also Johnson, R. W., Jr.
Watkins, N. D. Behaviour of the geomagnetic field during the Miocene period in south-eastern Oregon ------------------------ 195-286
Watson, Kenneth, Murray, B. C., and Brown, Harrison. The stability of volatiles in the solar system --------------------- 197-30
Watt, A. D., Mathews, F. S., and Maxwell, E. L. Some electrical characteristics of the Earth's crust ---------------------- 201-148
Watt, D. E., Ramsden, D., and Wilson, H. H. The half-life of carbon-14 -- 193-8
Watt, P. A. See Bower, D. R.
Watznauer, Adolf. The developmental tendency of fundamental geotectonic concepts since the turn of the century in the works of F. Kossmat (for the 90th birthday of Franz Kossmat) -------------- 197-177
Waxman, M. H. See Gondouin, M.
Weart, W. D. Particle motion near a nuclear detonation in halite -- 195-95
Weaver, J. T. A discussion of the "fault" and "dike" problems in magnetotelluric theory ------------------------------------ 201-61
Weaving, B. Magnetic anisotropy in chondritic meteorites -------- 194-42
—— The magnetic properties of the Brewster meteorite ----------- 197-47
Webb, A. W., McDougall, Ian, and Cooper, J. A. Retention of radiogenic argon in glauconites from Proterozoic sediments, Northern Territory, Australia ------------------------------ 203-19
Webb, J. P. See Doyle, H. A.
Webb, P. N. Isotope dating of Antarctic rocks; a summary—1 ----- 201-22
Weber, C. Faults with horizontal displacement in Japanese tectonics. Based on recent works --------------------------------- 203-177
Weber, J. N., and Keith, M. L. Carbon-isotope composition and the origin of calcareous coal balls -------------------------- 195-227
Weber, Max. A method of calculating wave front velocities in the vicinity of the earthquake focus ------------------------------- 196-156
—— An elementary generalization of the expressions of Mohorovičić, Wiechert and others in seismic traveltime studies -------------- 197-119
—— On the interpretation of seismic refraction measurements with discontinuous power series ------------------------------------ 196-331
Weeks, W. F. Studies of salt ice. I. The tensile strength of NaCl ice --- 192-353
Weeks, W. F., and Assur, Andrew. Structural control of the vertical variation of the strength of sea and salt ice --------------- 201-358
Weertman, Johannes. Catastrophic glacier advances -----195-181, 198-162
—— Dislocations moving uniformly on the interface between isotropic media of different elastic properties ------------------- 201-107
—— Stability of the ice-age caps -------------------------------- 195-180
—— The Eshelby-Schoeck viscous dislocation damping mechanism applied to the steady-state creep of ice ---------------------- 202-299
—— The thickness of continents --------------------------------- 196-212
Weill, Gilbert. A contraction of the Antarctic auroral zone observed during the initial phase of geomagnetic storms -------------- 198-243
See also Lebeau, André.
Weischet, Wolfgang. A landscape changes its face; the natural catastrophe in Chile -- 192-48
Weiss, R. J. Origin of the Earth's magnetic field ---------------- 199-213

Abstract

Welin, E. See Wickman, F. E.
Wells, R. J. Geophysical activity of the Carrizo Plains ---------- 197-157
Wentorf, R. H., Jr. Modern very high pressure techniques ------- 201-166
Wentorf, R. N., and Bovenkerk, H. P. On the origin of natural diamonds ---------- 193-26
Wentworth, R. C. See Apel, J. R., and Tepley, L. R.
Wernthaler, Rudolf. The study of tectonic movements and the Unified European Levelling Network (REUN) ---------- 192-190, 194-189
Werth, G. C., and Herbst, R. F. Comparison of amplitudes of seismic waves from nuclear explosions in four mediums -------- 198-99
Wescott, E. M., and Hessler, V. P. The effect of topography and geology on telluric currents ---------- 194-64
See also Mather, K. B.
West Australian Petroleum PTY Limited. Blue Hills-Logue seismic survey, Western Australia, 1959-1960 ---------- 202-290
West, David. New magnetometer for air survey ---------- 192-300
Westcott, P. See Stacey, F. D.
Westhusing, Keith. Project GNOME volunteer seismological teams- 200-122
Wetherill, G. W. Discordant uranium-lead ages. 2. Discordant ages resulting from diffusion of lead and uranium ---------- 202-2
See also Tilton, G. R., and Wasserburg, G. J.
Wheatley, G. Y. See Braun, T. H.
Wheeler, P. T. See King, C. A. M.
Whipple, F. L. The dust cloud about the Earth ---------- 196-47
—— Meteoritic erosion in space ---------- 201-33
—— On meteoroids and penetration ---------- 203-48
See also Veis, George.
White, B. L. See Henderson, J. R., Jr.
White, D. E., Anderson, E. T., and Grubbs, D. K. Geothermal brine well: Mile-deep drill hole may tap ore-bearing magmatic water and rocks undergoing metamorphism ---------- 197-213
White, D. E., and Waring, G. A. Volcanic emanations ---------- 202-311
White, J. F. Study of the Earth ---------- 195-133
Whitham, Kenneth, and Andersen, F. The anomaly in geomagnetic variations at Alert in the Arctic Archipelago of Canada --------- 196-281
See also Caner, B.
Whitten, C. A. Horizontal movement in the Earth's crust --------- 194-187
—— Measurements of small movements in the Earth's crust ------- 193-179
Wickman, F. E., Blomqvist, N. G., Geijer, P., Parwell, A., Ubisch, H. von, and Welin, E. Isotopic consitution of ore lead in Sweden ---------- 201-235
Wielądek, Romuald. Adjustment of static gravimeter measurements ---------- 199-162
—— Smoothing of magnetograph base lines ---------- 192-262
Wiese, Horst. Geomagnetic deep tellurics. Pt. 1. The electrical conductivity of the Earth's crust and upper mantle ---------- 192-43
—— Geomagnetic deep tellurics. Pt. 2. The strike of underground structures of electrical resistivity, inferred from geomagnetic variations ---------- 197-65
Wiggins, J. H., Jr. Note on the effect of record balancing upon strong motion earthquakes response spectra ---------- 193-97
Wiik, H. B. See Mason, Brian.
Wilcox, J. M. See Alfvén, Hannes.
Wilkes, M. V. The solar and luni-solar harmonic components of geomagnetic variation at San Fernando ---------- 193-268
Wilkie, J. R., and McNicol, R. W. E. Correlation between sporadic E ionization and the strength of the horizontal component of the Earth's magnetic field ---------- 197-244
Wilkinson, I. See Lowes, F. J.
Williams, David. Sunspot cycle correlations ---------- 203-244

Abstract

Williams, G. D., Baadsgaard, Halfdan, and Steen, G. Potassium-argon mineral dates from the Mannville group ---- 197-16

Williams, Jerome. Oceanography - An introduction to the marine sciences ---- 201-359

Williams, M. See Daughtry, A. C.

Williamson, J. M. See Hoffmann, R. A.

Willis, D. E. A note on the effect of ripple firing on the spectra of quarry shots ---- 196-173

—— Seismic measurements of large underwater shots ---- 203-145

Willkomm, H. See Bagge, E.

Willman, H. B. See Frye, J. C.

Willmore, P. L. A new seismic research group for Edinburgh ---- 193-98

Willmore, P. L., and Connell, D. V. A new short-period seismometer for field and observatory use ---- 203-109

Willmore, P. L., Herrin, Eugene, and Meyer, R. P. Examination of irregular sub-surface structures by seismic refraction methods ---- 198-318

Wilshusen, R. C. The combined use of core analysis and log data for better productivity evaluation ---- 199-104

See also Granberry, R. J.

Wilson, C. R., and Sugiura, Masahisa. Discussion of our earlier paper "Hydromagnetic interpretation of sudden commencements of magnetic storms" ---- 200-270

Wilson, H. H. See Watt, D. E.

Wilson, J. Tuzo. A possible origin of the Hawaiian Islands ---- 201-187

—— Evidence from islands on the spreading of ocean floors ---- 197-179

—— Hypothesis of Earth's behavior ---- 201-174

—— Some further evidence in support of the Cabot fault, a great Palaeozoic transcurrent fault zone in the Atlantic provinces and New England ---- 201-185

—— The Cabot and Great Glen faults ---- 197-182

—— The effect of new orogenetic theories upon ideas of the tectonics of the Canadian Shield ---- 199-138

Wilson, R. L. An instrument for measuring vector magnetization at high temperatures ---- 195-278

—— The palaeomagnetism of baked contact rocks and reversals of the Earth's magnetic field ---- 196-297

Wilson, R. L. See Ade-Hall, J.

Winch, D. E., Bolt, B. A., and Slaucitajs, Leonidas. Geomagnetic fluctuations with the frequencies of torsional oscillations of the Earth ---- 201-242

Winchester, J. W. See Chase, J. W.

Wing, L. W. Latitudinal passage: a principle of solar-terrestrial cycle behavior ---- 203-246

Wintenberger, M. Electrical and magnetic properties of sulfide and arsenide compounds of the transition elements. I. -- Electrical measurements by the point method. II. -- Electrical properties of chalcopyrite. III. Electrical and magnetic properties and bonds in arsenopyrite, cobaltite, and loellingite ---- 194-166

Wise, D. U. An origin of the Moon by rotational fission during formation of the Earth's core ---- 198-34

—— An outrageous hypothesis for the tectonic pattern of the North American cordillera ---- 198-148

Witkind, I. J. The night the Earth shook - A guide to the Madison River Canyon earthquake area ---- 200-85

Witt, E. O. See Lehner, F. E.

Witten, Louis. Gravitation - An introduction to current research ---- 198-166

Wlotzka, F. On the light-dark structure of the primordial gas-containing chondrites Breitscheid and Pantar ---- 201-26

See also König, H.

Abstract
Woeber, A. F., Katz, Samuel, and Ahrens, T. J. Elasticity of selected rocks and minerals ---------- 203-140
Wolbach, J. G. See Bell, Barbara.
Wold, R. J. See Behrendt, J. C.
Wolfenden, E. B. Geophysics in West Sarawak ---------- 200-166
Wood, A. B. A comparison of methods of determining velocity in wells in South Texas ---------- 202-276
Wood, J. A. Metamorphism in chondrites ---------- 194-26
Woodcock, A. H., and Friedman, Irving. The deuterium content of raindrops ---------- 202-191
Woollard, G. P. Crustal structure in Antarctica ---------- 202-181
Woollard, G. P., and Strange, W. E. Gravity anomalies land the crust of the Earth in the Pacific basin ---------- 202-155
Woolson, J. R., and others. Seismic and gravity surveys of Naval Petroleum Reserve No. 4 and adjoining areas, Alaska ---------- 200-149
Worzel, J. L. Geology and geophysics ---------- 198-357
—— Gravity reductions and observations at sea ---------- 192-219
See also Talwani, Manik.
Wright, C. S. See Duffus, H. J., English, W. N., Jacobs, J. A., and Lokken, J. E.
Wright, F. W. See Hodge, P. W.
Wright, H. E., Jr. See Bent, A. M.
Wuenschel, P. C. Synthetic seismograms calculated taking into account multiple reflections and refractions ---------- 202-280
Wulf, O. R. See Nicholson, S. B.
Wyllie, M. R. J. Interpretation of geophysical logging data in the case of sandstone oil and gas reservoirs ---------- 198-125
Wyllie, M. R. J., Gardner, G. H. F., and Gregory, A. R. Studies of elastic wave attenuation in porous media ---------- 195-85
Wyllie, P. J. The nature of the Mohorovičić discontinuity, a compromise ---------- 202-184
Wyrzykowski, T. See Niewiarowski, J.

Y

Y. W. I. Geochronology of New York State ---------- 201-7
Yabu, Takeo. See Rikitake, Tsuneji, and Yukutake, Takesi.
Yagi, Kenzo, Kawano, T., and Aoki, K. Types of Quaternary volcanic activity in northeastern Japan ---------- 203-343
Yagodovskiy, I. V. See Boltneva, L. I.
Yakovlev, A. T., and Ryabov, A. V. Power-driven apparatus for drilling shotholes ---------- 199-337
Yakovlev, G. N. See Yesikov, A. D.
Yakovlev, G. Ye., and Dikgof, Yu. A. Quantitative interpretation of data of electroprofiling above three-dimensional bodies ---------- 196-180
Yakovlev, I. A. See Berdichevskiy, M. N.
Yakovlev, I. P. Seeking breaks in the insulation in logging cables by use of recording devices ---------- 199-108
Yakub, L. I. See Belykh, V. A.
Yakubov, A. A., Kharitonov, M. F., and Matveyev, Ye. I. On methods of analyzing borehole temperature surveys (exemplified by investigations of the geothermy of the Artema Island and Gyurgyany-more fields) ---------- 196-251
Yakubson, K. I. Use of the induced activity method for qualitative estimation of the aluminum content of bauxites ---------- 199-301
Yakubson, K. I., and Guberman, Sh. A. Experimental investigation of space-energy distribution of neutrons in a model bed ---------- 197-323
Yakzhin, A. A., Zenkov, D. A., Larchenko, A. P., and Rusinov, L. A. Methods of exploring deposits of useful minerals and ways of improving them in the future (summary) ---------- 200-177

Abstract

Yama-ai, Mituko; Ozima, Minoru; and Nagata, Takesi. Self-reversal of remanent magnetization of magnetite at low temperatures - 201-272
Yamada, Naotoshi. See Shibata, Ken.
Yamagata, H. See Yasui, Y.
Yamaguchi, Hisanosuke. On the relation between formation factor and surface conduction of saturated sands ---------- 192-128
Yamaguchi, Hisanosuke, and Futamase, Kiyosi. Relationship between the chemical composition and electrical resistivity of groundwater ---------- 192-140
Yamaguchi, Rinzo. See Sato, Yasuo.
Yamaguchi, Yushin. A study of magnetic sudden impulses ---------- 194-260
Yamakawa, Kazumi. See Rikitake, Tsuneji.
Yamakawa, Norio. Scattering and attenuation of elastic waves. Part I. Scattering of elastic waves by various kinds of obstacles- 202-82
—— Scattering and attenuation of elastic waves, Part II. Attenuation of elastic waves due to scattering by randomly disturbed particles ---------- 202-83
Yamamoto, M. See Maeda, Hiroshi.
Yamasaki, Masao. See Aramaki, Shigeo.
Yanagihara, Kazuo. Geomagnetic micropulsations with periods from 0.03 to 10 seconds in the auroral zones with special reference to conjugate-point studies ---------- 200-262
—— Linear relationship between amplitudes and periods of geomagnetic variations ---------- 194-259
See also Kawamura, M., Kurusu, K., Nagai, M., and Sano, Y.
Yang, Erh-Hsu. Determination of the relief of the buried granite surface in the Ko-Chiu tin mining area in Yunnan by vertical electrical sounding ---------- 193-140
Yano, N. Measurement of natural radioactive dust in the atmosphere by electric precipitator ---------- 198-286
Yanovskaya, N. B. Electrical field of a dipole located on the surface of a thin conducting layer ---------- 195-109
Yanovskaya, T. B. See Golikova, G. V., and Keylis-Borok, V. I.
Yanovskiy, B. M. On the absolute determination of gravity at the VNIIM point (Leningrad) ---------- 192-226
—— Problems of paleomagnetism in the USSR ---------- 195-290
See also Lomanyy, V. D., and Sholpo, I. Ye.
Yanshin, A. L. See Peyve, A. V.
Yanson, Z. A. See Buldyrev, V. S.
Yanushevich, M. A. See Laskina, V. V.
Yao, Kuo-Hsing. See Liu, Kuo-Chien.
Yarmolyuk, V. A. The Dzhugdzhur meteorite ---------- 195-22
Yarosh, A. Ya. See Klubov, V. A.
Yaroshevskaya, G. A. See Davydova, N. I.
Yarushevskiy, G. A. See Ivanov, Yu. A.
Yastrebov, B. V., and Prorekhin, V. P. Main results of the use of a combination of methods in prospecting for ground water for irrigating pastures in the Syrian desert ---------- 198-111
Yastrebova, T. A. See Boyarskikh, G. K.
Yasui, Y. An investigation on some earthquake swarms in southern Kyushu ---------- 202-58
Yasui, Y., and Yamagata, H. Investigation of the rumbling of the Earth in southern Kyushu district ---------- 192-54
Yasui, Yutaka. Summary of forecasting the explosion of Volcano Sakurajima ---------- 202-355
Yatskiv, Ya. S Inaccuracy of the annual aberration constant and daily variations of latitude ---------- 203-125
Yedinak, P. See Hemenway, C. L.
Yeferina, G. P. See Kukhtikova, T. I.
Yefimkina, S. S. See Shneyerson, M. B.

Abstract

Yefimov, K. P. See Mirkina, S. L

Yefimova, Ye. I. See Nikolayev, D. S.

Yegiazarov, B. Kh., and Zakrzhevskiy, G. A. Cenozoic volcanism of the eastern part of the Koryak range ---------- 202-352

Yegorkin, A. V. Structure of the Earth's crust in the southeast of the Russian platform ---------- 194-343

Yegorov, A. P., and Nemtsov, L. D. Attempt to conduct poly-detailed gravimetric surveys under taiga conditions in Siberia ----- 199-167

Yegorov, N. N., Kalinin, V. A., and Trubitsyn, V. P. Rayleigh wave absorption in a layer on a half-space ---------- 194-105

Yegorov, Yu. M. Possibilities of widening the range of frequency of a high sensitivity magnetic microvariation station ---------- 199-219

Yeliseyeva, G. D. See Burkser, Ye. S.

Yemelin, V. I., and Chuprov, K. S. Use of the ultrasonic method for determining the dynamic elastic parameters of rocks under field conditions ---------- 199-80

Yenikeyev, P. N. See Kalinin, N. A.

Yepinat'yeva, A. M. Multiple shocks in explosions in boreholes --- 201-331

—— On dynamic relations of reflected and head waves beyond the initial point ---------- 193-107

—— On the dynamic relationships of reflected and refracted waves in seismic surveying ---------- 194-315

Yepinat'yeva, A. M., Kuznetsov, V. V., Ostrovskiy, Yu. A., and Khudzinskiy, L. L. Some experimental data on the form of impulses generated by explosions in boreholes ---------- 203-319

Yeremenko, N. A. Variation in the isotopic composition of oils in the USSR along the stratigraphic section ---------- 199-211

Yeremeyev, V. F. See Molodenskiy, M. S.

Yeremina, A. S. See Bedcher, A. Z.

Yeres'ko, S. I. Seismic shocks with epicenters at Sochi ---------- 202-54

Yermakov, V. I., Peysikov, Yu. V., and Shatsov, A. N. Investigation of the radioactivity of the sea floor ---------- 199-284

Yeroshenko, Ye. G. See Dolginov, S. Sh.

Yershov, I. A., and Lyamzina, G. A. On the seismic effect of an explosion in the region of Pokrovsk Ural'skiy ---------- 192-117

Yesikov, A. D., Beschastnikova, G. S., and Yakovlev, G. N. Determination of the isotopic composition of strontium on the MI-1305 mass-spectrometer ---------- 199-210

—— Rubidium and strontium determination with the flame photometer ---------- 199-3

Yevdokimov, G. S., Kaplan, B. L., Kogarko, S. M., Lovlya, S. A., Novikov, A. S., and Solidilov, L. N. On the problem of the generation of elastic vibrations by detonations of gas mixtures under water ---------- 197-327

Yevseyev, S. V. Earthquakes of the Ukraine ---------- 201-68

Yevseyev, S. V., Levitskaya, A. Ya., and Sagalova, Ye. A. Seismicity of the Carpathian zone ---------- 192-61

Yevtushenko, Ye. I. See Ogorodnik, I. P.

Yoder, H. S., Jr., and Tilley, C. E. Origin of basalt magmas: An experimental study of natural and synthetic rock systems ------- 199-197

Yokoyama, Izumi See Rikitake, Tsuneji.

Yordanov, N., Vergilov, V., and Pavlova, M. Geologic age of the crystalline complex and of the granites of South Bulgaria determined by the argon method ---------- 201-17

Yoshida, Minoru. See Iwasaki, Iwaji.

Yoshikawa, Keizo. See Kubotera, Akira.

Yoshikawa, Torao. Activities of the Japanese Antarctic Research Expedition 1956-1962 ---------- 199-122

Yoshimatsu, Takasaburo. Results of geomagnetic routine observations and earthquakes (1) ---------- 195-240

Abstract

Yoshimatsu, Takasaburo. Results of geomagnetic routine observations and earthquakes (II) ---------- 202-204
—— Universal time daily inequality of the time of maximum depression of ssc in storm-time ---------- 195-264
Yoshiyama, Ryoichi, and Onda, Isao. Stability of waves through a heterogeneous medium and apparent internal friction. Part 2 with special remarks on wave propagation in a periodic structure - 196-149
Yoshizawa, Shizuyo. See Kanai, Kiyoshi.
Yoshizawa, Y. See Sugawara, A.
Yudborovskiy, I. Kh. See Shan'gin, N. V.
Yukutake, Takesi. Archaeomagnetic study on volcanic rocks in Oshima Island, Japan ---------- 195-291
—— The westward drift of the magnetic field of the Earth ---------- 193-264
Yukutake, Takesi, and Yabu, Takeo. Geomagnetic studies on Volcano. Mihara. The 9th paper ---------- 195-354
See also Rikitake, Tsuneji.
Yungul, S. H., and Dehlinger, Peter. Preliminary free-air gravity anomaly map of the Gulf of Mexico from surface-ship measurements and its tectonic implications ---------- 193-226
See also Dehlinger, Peter.
Yun'kov, A. A. Calculation of coordinates of the center of gravity of a disturbing body by the Δg anomaly ---------- 194-207
—— Calculation of the effect of mine workings and irregularities of their walls on Δg measurements ---------- 198-176
—— Classification of Δg anomalies ---------- 194-208
—— Classification of gravity surveys ---------- 198-171
—— Interpretation of magnetic and gravity anomalies above dome-shaped structures ---------- 197-195
—— The fitting of V_{xz} anomalies to one-, two-, or three-dimensional bodies ---------- 198-174
Yunusov, F. F. See Khalevin, N. I.
Yurchenko, B. I. Southern boundary of distribution of salt-dome tectonics in the Lower Volga area ---------- 197-163
Yurkevich, O. I. See Shechkov, B. N., and Vvedenskaya, N. A.
Yurkina, M. I. See Molodenskiy, M. S.
Yurkova, L. A., and Blokhin, P. A. Plan of the present structure of the crystalline basement of the eastern part of the Russian platform ---------- 201-155

Z

Zablocki, C. J. Electrical and magnetic properties of a replacement-type magnetite deposit in San Bernardino County, California ---------- 193-148
Zabriyev, K. S. The second international conference on earthquake-proofing in Japan ---------- 203-86
Zadro, Maria. New type of gravimeter for the study of the gravitational tide ---------- 192-60
—— "Power spectrum analysis" of the deviations of the vertical registered during the total eclipse of the sun of February 15, 1961 --- 192-203
Zaghloul, Z. M. Note on the occurrence of uranothorite and radioactive zircon in the Black Sands of Rosetta ---------- 194-293
Zähringer, J. Isotope effect and abundance of the rare gases in stone meteorites and on the Earth ---------- 192-19
—— On the primordial rare gases in the Kapoeta and Staroye Pesyanoye achondrites ---------- 194-34
See also Kirsten, T.
Zakharchenko, V. F. Effect of transmission on the time distribution of moderative neutrons and impulse neutron logging ---------- 196-321

Abstract

Zakharchenko, V. F. On the problem of the applicability of approximate schemes of the theory of neutron migration for the solution of problems of neutron geophysics 201-319
See also Ponomarev, V. N.

Zakharov, V. Kh. Interpretation of anomalies of dipole electromagnetic profiling 194-129

Zakrzhevskiy, G. A. See Yegiazarov, B. Kh.

Zaleskiy, B. V., and Rozanov, Yu. A. Methods of studying the physico-mechanical properties of rocks 198-352

Zalesskiy, B., and Sinyakov, I. On the Upper Mantle Project conference 202-186

Zamarayev, S. M. Tectonic make-up and geologic evolution of the southeast part of the Siberian platform 195-326

Zambrano, R. See Norinelli, Armando.

Zamoriy, P. K. See Bondarchuk, V. G.

Zandle, G. L. See Anderson, L. A., Meuschke, J. L., and Popenoe, Peter.

Zar'yanov, V. I. See Amirkhanov, Kh. I.

Zátopek, Alois. On the results of statistical investigation of periods of European microseisms 200-304

Zavarzin, G. N. See Babayants, S. P.

Zavoyskiy, V. N. See Krutivskaya, Z. A.

Zaychenko, V. Yu. See Belomar, O. D.

Zaydel', A. N. See Zhiglinskiy, A. G.

Zayonchkovskiy, M. A. On the absolute amplitude of seismic signals observed in deep seismic sounding 194-321
See also Aver'yanov, A. G., and Galkin, I. N.

Zazaynov, Yu. V. See Ryss, Yu. S.

Zelenov, K. K. See Gorshkov, G. S.

Zelentsov, I. A. See Kolmakov, M. V.

Zeller, E. J., and Ronca, L. B. Thermoluminescence techniques in determination of the stress and crystallization history of ice 197-347
See also Angino, E. E.

Zel'tsman, P. A. See Demidenko, Yu. B.

Zenkin, G. M. See Plekhanov, G. F.

Zenkov, D. A. See Yakzhin, A. A.

Zeto, R. J. See Dachille, Frank.

Zeverev, S. M. See Aver'yanov, A. G.

Zharkov, A. P. See Starik, I. Ye.

Zharkov, V. N. Physics of the Earth's core 193-258
—— Problem of thermoelastic stresses in the body of the Earth 203-191

Zharkov, V. N., and Kalinin, V. A. Equation of state of gabbro and dunite at high pressures 198-209
—— Reflection of seismic waves at the boundary of the mantle and the core 199-66

Zhdanov, V. V., and Rezanov, I. A. On the status and problems of the study of the physical properties of rocks at high pressures and temperatures 196-343

Zhegalov, Yu. V. Volcanism and tectonics of the Commander Islands 202-139

Zhelankina, T. S. See Pyatetskiy-Shapiro, I. I.

Zhelebov, P. P. See Malakhov, A. A.

Zhelin, G. Secular vertical crustal movements in the north-western part of the USSR and their relation to similar movements in Finland 194-192

Zhidov, A. Ya., Mirkina, S. L., and Golubchina, M. N. On the absolute age of the alkaline nepheline syenites of the northern Baikal upland 199-22

Zhiglinskiy, A. G., Zaydel', A. N., and Kund, G. G. The spectral method of determining Pb-204 198-2

Abstract
Zhiglinskiy, A. G., Zaydel', A. N., and Kund, G. G. The spectral method of determining Sr-87 ---- 195-5
Zhirov, K. K., and Urusov, V. S. An appraisal of the results of analyses of leads having isotopic compositions close to each other ---- 196-272
Zhirova, V. V., Zykov, S. I., and Tugarinov, A. I. On the age of zircons of the oldest formations of the Kola Peninsula ---- 196-22
Zhivago, A. V. Outlines of Southern Ocean geomorphology ---- 202-310
Zhogolve, L. P. See Smelov, A. A.
Zholondz', V. Ya. Heat-resistant inclinometer for a single-strand cable with pressure compensator ---- 199-131
Zhongolovich, I. D. Earth satellites and geodesy ---- 195-140
Zhuk, I. Ya., and Puk'yanov, N. P. Semiautomatic means of constructing seismic time sections ---- 199-324
Zhulin, I. A. Contribution to the problem of the origin of polar geomagnetic disturbances ---- 198-239
—— On the magnetodynamic theory of geomagnetic storms ---- 194-270
Zhuravlev, V. K. See Plekhanov, G. F.
Zhuravlev, V. P., and Popov, V. K. On calculation of screen effects of two thin layers on apparent resistivity curves in the interpretation of electrical logging diagrams ---- 201-146
Zhuvagin, I. G., Akchas'yanov, Yu. A., Khayrullin, R. V. On the possibility of using ion-exchange resins as carriers of radioactive isotopes ---- 199-305
—— Use of radioactive isotopes for industrial investigations on oil and gas fields ---- 199-292
Zhuzgov, L. N. See Dolginov, S. Sh.
Zidarov, D. Determination of local and regional gravity (or magnetic) fields ---- 196-201
—— On a new possibility of solution of the inverse gravimetric, magnetic, and electrical problem ---- 196-200
—— On a property of magnetically soft and isotropic ellipsoids ---- 196-301
—— On certain properties of ellipsoids magnetized in an inductive and permanent manner ---- 196-303
—— On the field of inductively magnetized bodies ---- 196-302
Zietz, Isidore. See Allingham, J. W., Andreasen, G. E., and Grantz, Arthur.
Zijl, J. S. V. van, Graham, K. W. T., and Hales, A. L. The palaeomagnetism of the Stormberg lavas of South Africa. . Evidence for a genuine reversal of the Earth's field in Triassic-Jurassic times ---- 195-289
—— The palaeomagnetism of the Stormberg lavas, II. The behavior of the magnetic field during a reversal ---- 196-296
Zil'bershteyn, M. B. See Belelovskiy, M. L.
Živadinović, Miljko. Formulas for the calculation of the influence of gravity of cylindrical masses whose normal couples are certain triaxial of quadralateral polygons ---- 193-196
Zivert, R. R. See Vigdorovich, D. A.
Zmuda, A. J., and Neuman, Martha. The correction and mutual dependence of harmonic coefficients ---- 192-273
Zmuda, A. J., Pieper, G. F., and Bostrom, C. O. Solar protons and magnetic storms in February 1962 ---- 197-247
See also Pieper, G. F.
Znamenskiy, V. V. See Ryabinkin, L. A.
Zolotov, I. G. See Metallova, V. V.
Zommer, I. E., and Akhmetshanov, Kh. S. On the problem of calculating the effect of relief in gravimetric surveys ---- 199-164
Zotkin, I. T. See Florenskiy, K. P.
Zounková, Milada. See Beránek, Břetislav.
Zubareva, E. P. Preliminary results of Earth current observations at Tixie Bay ---- 195-42

Abstract

Zubareva, E. P., Korobkova, G. I., Nikitina, N. M., and Troitskaya, V. A. Gigantic pulsations in the Soviet Arctic during 1935-1956 ---------- 194-258
Zubov, V. G. See Mizyuk, L. Ya.
Zuyev, G. N. Remote polar switching of the lines in d-c electric prospecting ---------- 194-137
Zvegintsev, A. G. See Vlasov, A. Ya.
Zverev, G. N., and Kusov, V. A. Magnetic dipole in a medium with a cylindrical interface ---------- 201-140
Zverev, S. M. Frequency characteristics of explosions with GSZ in deep seas ---------- 198-324
—— On multiply refracted and reflected waves in the ocean -------- 194-108
See also Aver'yanov, A. G., Gal'perin, Ye. I., and Kosminskaya, I. P.
Zybin, K. Yu. See Barsukov, O. M.
Zykov, S. I. See Stupnikova, N. I., Tugarinov, A. I., and Zhirova, V. V.
Zykov, S. P. See Vinogradov, A. P.

SUBJECT INDEX

A

- Acoustic logging, amplitude measurement: Morlet 197-337
  - attenuation logger: Morlet 197-338
  - cement bonding: Anderson 193-332
  - curvilinear path of rays: Roman 201-333
  - direct integration: Manchee 202-278
  - fractured reservoirs: Kuznetsov 198-326
  - geometrical factors: Kokesh 202-274
  - instrumentation, U.S.S.R.: Levi 199-320
  - methods compared: Gretener 202-277
  - porosity: Shan'gin 197-339; Wacholz 196-336
  - refraction and reflection of sonic energy: Tuman 194-305
  - sandstones, reservoir properties: Pickett 202-279
  - synthetic seismograms from: Dürschner 202-285
  - thermal stresses around borehole: Tuman 195-321
  - velocity variations near borehole: Hicks 202-275
  - wave picture: Gratsinskiy 203-320
- Africa, age, general listing: Darnley 192-6
  - age, metamorphic history: Nicolaysen 197-18
  - geophysical surveys: Makowiecki 202-105; Moody 192-146
  - gravity networks: Masson Smith 195-195; Overseas Geological Surveys 192-222
  - gravity and magnetic surveys: Jones 200-213
- Age, basalt, India, Deccan traps: Khambata 193-15
  - basalt, Tanganyika: Leakey 201-11
  - basic and ultrabasic rocks, U.S.S.R.: Gerling 195-13
  - biotite, Hungary: Földvári-Vogl 192-8
  - carbonate sediments, Australia: Skinner 198-21
  - clays, ambiguous values: Hurley 200-5
  - continental sial, Sr-87 model: Hurley 197-10
  - crust of earth: Shukolyukov 195-1
  - dolerite, Antarctica: McDougall 198-22
    - British Guiana: McDougall 202-11
    - England: Miller 203-9
- Age—Continued
  - dolerite—continued
    - South Africa: McDougall 198-22
  - earth: Starik 195-2; 196-6
  - eclogite, Scotland: Miller 200-23
  - extrusive rocks, Hawaii: McDougall 198-10
  - fergusonite, Nigeria: Darnley 202-13
  - fluvial sediments, Nile River: Fairbridge 196-14
  - galaxy: Churchhouse 196-41
  - galena, Greece: Létolle 203-15
    - Netherlands: Priem 195-11
    - Sweden: Wickman 201-235
  - general listing, Africa: Darnley 192-6
    - Antarctica: Heintz 202-26; Krylov 195-16, 196-30; Picciotto 197-27; Ravich 197-28; Webb 201-22
    - Australia: Evernden 193-16
    - California: Bushee 202-9
    - Canada: Beall 202-10; Lowdon 198-11; Wanless 198-12
    - Greenland: Haller 193-12
    - Japan: Aldrich 197-17
    - New York: Y.W.I. 201-7
    - U.S.S.R.: Knyazev 197-24
    - West Africa: Bonhomme 194-13
  - geomagnetic polarity epochs, North America: Cox 201-230
  - glacial rebound, Canada: Lee 202-117
  - glaciation, Alaska: Bengtson 198-9
    - Illinois: Frye 200-11
    - Massachusetts: Ogden 200-10
    - Norway: Liestol 203-11
  - glass, Germany: Gentner 193-50, 197-21
  - glauconite, Alberta: Williams 197-16
    - Australia: Webb 203-19
  - granite, Antarctica: Bellair 194-22
    - Brazil: Aldrich 197-17
    - British Guiana: Bowie 197-19
    - Cameroun: Gazel 200-21
    - Colorado: Boyer 194-9
    - England: Dodson 196-15
    - France: Bonhomme 200-24; Despois 199-17; Faul 201-14; Graindor 196-18; Kaplan 199-16; Vialette 194-15
    - Germany: Faul 201-14
    - Italy: Eberhardt 198-16
    - Japan: Miller 198-20; Shibata 196-28, 198-19
    - Kenya: Saggerson 200-20
    - Mississippi: Denison 202-6
    - Northern Ireland: Miller 200-22

- Age—Continued
  - granite—continued
    - Poland: Przewlocki 194-18
    - Quebec: Poole 203-1
    - Sumatra: Katili 202-24
    - Swaziland: Allsopp 196-13
    - Switzerland: Grünenfelder 203-13
    - Thailand: Aldrich 197-17
    - U.S.S.R.: Bondarenko 200-31, 201-18; Dagelayskiy 200-35, -38; Fishman 196-24; Komlev 195-15; Kuzhel'nyy 194-20; Meslenikov 200-37, -40, -41; Tokarev 202-20
    - Yugoslavia: Cervenjak 199-19; Deleon 195-12
  - granodiorite, Elba: Eberhardt 196-19
  - igneous and metamorphic rocks, Antarctica: Angino 196-29
    - Appalachians: Faul 197-13
    - Australia: Binns 203-20
    - British Columbia: Leech 194-10
    - Bulgaria: Yordanov 201-17
    - Canada: Burwash 200-18
    - Europe: Vinogradov 196-21
    - Germany: Davis 197-20
    - India: Venkatasubramanian 200-45
    - U.S.S.R.: Dagelayskiy 200-32; Maslenikov 200-29, -33
  - igneous rocks, Alaska: Grantz 201-10
    - Alberta: Hunt 194-12
    - Antarctica: Halpern 196-12
    - Arizona: Creasey 193-11
    - British Columbia: Gordy 194-11; Hunt 194-12; Tipper 198-14
    - California: Hsu 200-15; Silver 200-13
    - Czechoslovakia: Smejkal 192-7
    - Fiji: McDougall 202-25
    - Italy: Ferrara 201-12
    - Missouri: Tilton 194-6
    - Montana: Hunt 194-12
    - Oklahoma: Tilton 194-6
    - Scotland: Miller 203-10
    - Union of South Africa: Clifford 193-13
    - U.S.S.R.: Artemov 198-18; Firsov 200-26; Krasnobayev 195-14; Maslenikov 200-28; Nenashev 192-11; Priyatkina 200-34; Shurkin 202-18; Stupnikova 192-10
  - illite, function of grain size: Bailey 194-5
  - iron-manganese nodules, Indian and Pacific Oceans: Nikolayev 203-18
  - lake deposits, Wyoming: Love 193-180
    - New Mexico: Bent 200-12
  - lead method, accuracy: Burkser 193-3
  - lead minerals, Australia: Richards 200-46
- Age—Continued
  - lignite in terrace deposit, Sahara Desert: Beucher 203-14
  - magnetite, Pennsylvania: Fanale 197-11; Green 197-12
  - marine terraces, Viet Nam: Saurin 199-24
  - metamorphic history, Africa: Nicolaysen 197-18
  - metamorphic rocks, Algeria: Eberhardt 199-15
    - Alps: Jäger 196-20
    - New York: Long 192-4, -5
    - Quebec: Snelling 197-15
    - Spitsbergen: Hamilton 194-19
    - U.S.S.R.: Bondarenko 200-30; Firsov 197-26; Proshchenko 194-21
  - meteorites: Burkser 194-43; Hintenberger 197-50
    - exposure age: Voshage 193-31
    - K-40/Ar-40: Marshall 194-44
    - Sikhote-Alin: Fisher 197-48
    - stone: Kirsten 198-27
    - strontium in stones: Gast 193-33
  - migmatite, France: Graindor 196-17
    - U.S.S.R.: Shurkin 202-17
  - mineral deposits, Quebec: Campbell 196-9
  - modern sediments, Atlantic Ocean: Hurley 201-1
    - Indian and Pacific Oceans: Starik 199-23
  - Paleolithic culture, U.S.S.R.: Ivanova 197-23
  - pegmatites, Bulgaria: Alekseyev 201-16
    - Burundi: Monteyne-Poulaert 199-12
    - Congo: Monteyne-Poulaert 199-14
    - Italy: Ferrara 201-13
    - Rwanda: Monteyne-Poulaert 199-12
    - Scotland: Bowie 197-19
    - U.S.S.R.: Maslenikov 200-39
  - pollen, U.S.S.R.: Neyshtadt 196-23
  - Precambrian rocks, Alberta: Godfrey 200-19
    - Asia: Vinogradov 197-25
    - British Guiana: Snelling 202-12
    - Canada: Stockwell 198-13
    - Congo: Ledent 199-13
    - Finland: Marmo 193-14; Simonen 197-22
    - Greenland: Kulp 196-11
    - India: Pichamuthu 196-27; Sarkar 200-44
    - Texas: Wasserburg 194-8
    - U.S.S.R.: Glebova-Kul'bakh 201-19; Kratts 203-17; Lobach-Zhuchenko 200-43; Pinayeva 200-42; Polkanov 200-25
    - United States: Tilton 198-5
    - Wyoming: Bassett 198-8
  - primary basaltic magma: Gerling 200-6

Age—Continued
- Quaternary bones and shells, U.S.S.R.:Cherdyntsev 200-27
- radiocarbon dates, Alaska: Goldthwait 200-16
  - Australia: Grant-Taylor 193-17
  - California: Emery 196-8
  - Canada: Dyck 203-24, Gfeller 203-38
  - Europe: Kind 202-21
  - general listing; Barker 203-28; Callow 203-23; Chandler 203-25; Crane 203-33; Damon 203-36; Fergusson 203-21; Grant-Taylor 203-30; Hubbs 203-34; Hyyppä 203-37;Kigoshi 203-29; Kusumgar 203-35;Rusnak 203-22; Stuckenrath 203-27;Stuiver 203-39; Trautman 203-26; Vogel 203-31
  - Iowa: Daniels 201-8
  - Iraq: Solecki 203-16
  - Libya: Vita-Finzi 202-14
  - Lord Howe Island: Squires 201-21
  - Louisiana: Corbeille 199-8
  - Minnesota: Jelgersma 194-7
  - New Zealand:Grant-Taylor 193-17
  - Nile River: Fairbridge 196-14
  - Northwest Territories: Müller 196-10
  - Norway: Olsson 199-20
  - Poland: Dumanowski 192-9
  - Sweden; Östlund 203-32
  - Switzerland: Gfeller 203-38
  - U.S.S.R.: Serebryannyy 202-22 Starik 199-21; Vinogradov 192-3
  - Wisconsin: Broecker 202-7
- Rhünda skull, host sediment: Jacobshagen 199-10
- schists, U.S.S.R.: Semenenko 196-25
- sedimentary rocks, U.S.S.R., Lena basin: Dubar' 196-26
- sedimentation rate: Mediterranean Sea: Delibrias 194-14
- shale, (authigenic biotite), Quebec: Beall 195-10
  - U.S.S.R.; Permyakov 201-20
- shells, Madagascar: Battistini 199-11
- syenite, U.S.S.R.: Bondarenko 200-36; Zhidkov 199-22
- tectonic activity, Australia: Kanasewich 197-14
  - Canadian shield: Stockwell 200-17
  - India: Mahadevan 202-23
- tektites, Australites: Baker 199-39
  - Georgia: Clarke 196-57
  - Germany: Gentner 197-21
  - Moldavites: Gentner 193-50
- thermal geochronology; Lafitte 194-177
- uranium minerals, Colorado Plateau: Miller 202-8
  - Czechoslovakia: Borucki 201-15

Age—Continued
- uranium minerals—Continued
  - England: Bowie 197-19
  - France: Durand 194-16, 196-16, 203-12
  - New Mexico: Granger 201-9
  - Norway: Bjørlykke 202-16
  - Portugal: Bowie 197-19
  - Turkey: Durand 194-17
- veins, U.S.S.R.: Shurkin 202-19
- volcanic rocks, California: Dalrymple 200-14
  - New Mexico: Bassett 198-6
  - Oregon: Hay 196-7
  - Tanganyika: Hay 199-9
  - Utah: Bassett 198-7
- wood, France: Rudel 202-15
  - Greece: Galanopoulos 198-17
- zircon, Alps: Buchs 199-18
  - Antarctica: Ford 198-23
  - U.S.S.R.: Zhirova 196-22

Age determinations, absolute age, term criticized: Holmes 197-1
- before present, term criticized: Bird 197-2
- bibliography, 1958-60: Bugel'skaya 199-25
- carbon-14 method, accuracy: Libby 200-7
  - apparatus: Felber 197-8
  - Fifth International Symposium: Godwin 192-2
  - half life: Godwin 193-6: Mann 193-7; Olsson 193-9; Watt 193-8
  - liquid scintillator: Cuypers 196-5
  - microchemical method: Molina Berbeyer 200-8
  - mollusk shells: Keith 203-5; Rubin 196-4, 203-6
  - review: Serebryannyy 195-9
  - South America: Evans 197-7
  - unpurified CO_2: Kalab 193-10
- chlorine-36, salt lakes: Bagge 201-6
- fission tracks in mica: Price 196-3, 203-8
- fluorite, crystal defects: Titley 194-4
- lead-alpha method: Babecki 201-5; Ford 198-23
- lead method, compared with argon method: Mirkina 194-2
  - discordant ages corrected: Stieff 198-1
  - discrepancies: Masuda 200-3
  - recent minerals: Kosztolanyi 203-3
  - spectral Pb-204 determination: Zhiglinskiy 198-2
- lead minerals: Schütze 194-1
- methods reviewed: Amirkhanov 199-7; Hamilton 200-1;Newell 195-4; Voytkevich 193-2

Age determinations—Continued
  obsidian, method described: Friedman 197-9
  Pa-231/U - Th-230/U method: Rosholt 198-4
  potassium-argon method: Gerling 200-6
    accuracy: Gel'man 193-5
    apparatus: Shishkin 198-3
    argon-39 as tracer: Naughton 199-5
    argon diffusion: Gerling 202-4; Murin 196-1; Salop 201-3; Vinogradov 199-4
    argon loss: Brandt 195-7; Khutsaidze 195-8
    compared with lead method: Mirkina 194-2
    decay constants: Rubinshteyn 194-3
    fossils: Lippolt 196-2
    sediments: Hurley 201-1
    shales: Hower 201-2
    sodium diffusion: Sippel 197-6
    volcanic rocks: Kulp 203-4
  review: Tilton 202-1
  rubidium-strontium method, flame photometer measurements: Yesikov 199-3
  rubidium-strontium method, micas: Gerling 193-4
    sources of error: Gorokhov 195-6
    spectral isotopic analysis: Starik 202-5
    Sr-87 by spectral analysis: Zhiglinskiy 195-5
    theory of: Riley 197-5
  skeletal material, nitrogen test: Oakley 200-9
  time scales: Afanas'yev 197-3; Poole 203-1; Rubinshteyn 193-1; Vinogradov 195-3, 198-24, 199-6
  uranium-equilibrium method, marine carbonates: Broecker 201-4
  uranium-lead method: Brandt 202-3; Burkser 199-1; Gerling 192-1; Sobotovich 199-2; Tugarinov 200-4; Wampler 197-4; Wasserburg 203-2; Wetherill 202-2
  uranium-xenon method: Butler 202-200; Shukolyukov 203-7
  value to geology: Afanas'yev 200-2
Alaska, age, glaciation: Bengtson 198-9
  age, igneous rocks: Grantz 201-10
    radiocarbon dates: Goldthwait 200-16
  earthquakes, 1788-1961: Davis 194-68
    mechanism: Stauder 196-118
Alaska—Continued
  geophysical surveys, 1960: Davison 194-170
    Naval Petroleum Reserve No. 4: Woolson 200-149
  magnetic field, observations: Coast and Geodetic Survey 203-266
  magnetic surveys: Andreasen 197-295; Grantz 193-298, 198-278; Henderson 197-294
  radioactivity, air: Lockhart 193-313
  volcanic activity, Katmai: Bordet 203-336
Alberta, age, glauconite: Williams 197-16
  age, igneous rocks: Hunt 194-12
    Precambrian rocks: Godfrey 200-19
  glaciers, Athabaska Glacier: Kanasewich 201-193
Aleutian Arc, earthquakes, aftershocks: Duda 194-77
    mechanism: Schäffner 194-78
  volcanic activity, magma types: Coats 202-315
Algeria, age, metamorphic rocks: Eberhardt 199-15
  crust, thickness: Mechler 195-103, 196-171; Merlet 196-258
  seismicity, Hoggar Range: Grandjean 195-49
Alps, age, metamorphic rocks: Jäger 196-20
  age, zircon: Buchs 199-18
  crust, structure: Behnke 193-241; Closs 193-239; Fuchs 193-242; Morelli 193-240
  glaciers, Breithorn: Fisher 201-194
Andes Mountains, geophysical research: Tuve 201-163
Antarctic Ocean, submarine geology: Zhivago 202-310
Antarctica, age, dolerites: McDougall 198-22
    age, general listing: Heintz 202-26; Krylov 195-16; 196-30; Picciotto 197-27; Ravich 197-18; Webb 201-22
    granite: Bellair 194-22
    igneous and metamorphic rocks: Angino 196-29
    igneous rocks: Halpern 196-12
    zircon: Ford 198-23
  crust, thickness: Evison 201-229; Woollard 202-181
  earthquakes, mechanism: Hatherton 196-121
  geophysical surveys: Nudel'man 198-142; Yoshikawa 199-122
  geotectonics, continental drift: Hamilton 201-181
  glaciers: Stuart 197-190

- Antarctica—Continued
  - glaciers—Continued
    - Filchner Ice Shelf: Behrendt 192-194
    - observations: Budd 198-161
    - review: Mellor 194-198
    - Roosevelt Island: Bentley 192-193
    - Ross Ice Shelf: Crary 192-195; Swithinbank 203-186
    - Taylor Glacier: Hamilton 192-192
  - gravity surveys: Bull 196-244; Cohen 195-204; Cook 200-223; Robinson 192-328; Tsukernik 203-325; Ushakov 196-245
  - isotopes, deuterium in the ice cap: Lorius 197-231
    - oxygen in ice: Gonfiantini 201-237, 202-197
  - magnetic field, diurnal variation: Nikol'skiy 201-260
    - observations: Miyazaki 199-220; Nagata 200-256
    - secular variations:Mansurov 198-231; Nagata 195-249, 200-257; 202-211
  - magnetic surveys: Ashley 199-274; Behrendt 197-299; Cook 200-223
  - meteorite craters: Schmidt 196-59
  - seismic surveys: Cook 201-353
    - ice thickness: Jewell 197-346
    - McMurdo Sound: Robinson 195-328
    - western ice shelf: Tsukernik 203-325
  - seismicity: Kogan 198-66
- Appalachians, age, igneous and metamorphic rocks: Faul 197-13
  - geophysical exploration: Howell 195-135
- Arctic, crust, structure: Pěč 192-243
  - magnetic field, second zone of disturbance: Nikol'skiy 201-263
  - magnetic surveys: Ostenso 203-299
  - Nansen Trough: Heintz 203-328
  - submarine geology, Canada: Pellitier 197-350
    - Canadian Archipelago: Collin 197-351
    - physiography: Ostenso 203-329
- Argentina, electrical surveys, copper: Elizalde 196-186
    - uranium: Jemma 195-311
  - gravity, tie with Spain: Baglietto 192-224
  - magnetic surveys, iron deposits: Gonzalez Laguinge 195-298
  - radioactivity surveys, uranium: Jemma 195-311; López 195-312
  - seismic surveys, submerged coastal plain: Ewing 198-332
- Arizona, age, igneous rocks: Creasey 193-11
  - geophysical surveys, uranium: Black 197-156
- Arizona—Continued
  - magnetic surveys: Dempsey 202-247, -248; Frischknecht 202-245; -246
  - meteorites: Breed 198-28;Mason 192-21
- Arkansas, magnetic survey, map: Keller 197-287
  - meteorites, Miller chondrite: Mason 192-20
- Asia, age, Precambrian rocks: Vinogradov 197-25
  - volcanic activity, Kamchatka to Indonesia: Taneda 203-354
- Atlantic Ocean, age, sediments: Hurley 201-1
  - Black Mud Canyon (France): Francis 198-354
  - gravity surveys: Talwani 192-233, 198-183
  - heat flow, profile: Nason 195-205
  - magnetic field, secular variations: Ivanov 200-258
  - magnetic surveys, Mid-Atlantic Ridge: Keen 198-279
  - mantle, seismic velocity: Tryggvason 193-253
  - seismic surveys: Ludwig 193-336
  - submarine cores, Project Loco: Kasanof 196-350
  - submarine geology, south of Great Britain: Stride 202-306
    - Straits of Florida:Hurley 197-349
  - submerged volcanoes: Sea Frontiers 196-349
- Atmosphere, Precambrian: Davidson 199-38
  - stages of evolution: Holland 197-169
- Australia, age, carbonate sediments: Skinner 198-21
  - age, glauconite: Webb 203-19
    - igneous and metamorphic rocks: Binns 203-20
    - lead minerals: Richards 200-46
    - Paleozoic rocks: Evernden 193-16
    - radiocarbon dates: Grant-Taylor 193-17; Squires 201-21
    - tectonic activity: Kanasewich 197-14
  - exploration summaries: Oilweek 200-167
  - geophysical surveys: Rudd 192-156; Thyer 199-123
  - gravity surveys, Leigh Creek coalfield: Pegum 192-232
    - Queensland: Magellan Petroleum Corporation 192-234; The Papuan Apinaipi Petroleum Company Limited 194-217
    - South Australia: Pegum 193-233
  - heat flow, Broken Hill: Sass 201-219
  - magnetic properties,basalts: Mumme 192-295

Australia—Continued
  magnetic surveys, Middleback Range: Mumme 201-309
  paleomagnetism, Mesozoic: Irving 198-266, -267, -270; Robertson 198-269
    Permian: Irving 201-284
  seismic surveys, Blue Hills-Logue area: West Australian Petroleum PTY Limited 202-290
    Great Artesian Basin: Milton 193-344
    Queensland: Artesian Basin Oil Company Proprietary Limited 192-342; Associated Australian Oilfields N.L. 192-343, 192-344, 202-289; Cree Oil of Canada Limited 202-291; L.H. Smart Oil Exploration Company Limited 192-341
Azores, volcanic activity, Capelinhos: Mendonça 202-328, -329

B

Bali, volcanic activity, Gunung Agung: Warf 201-360
Baltic shield, gravity surveys: Shustov 197-209
Barbados, geophysical surveys: Makowiecki 203-158
Barents Sea, earth currents: Fonarev 200-82
Bechuanaland, geophysical survey: Boocock 195-122
Belgium, earth tides, observations: Melchior 201-90
  electrical surveys, ground water: De Breuck 203-155
  magnetic field, observations: de Vuyst 192-263, 196-280, 203-268
  paleomagnetism, Permian: Magnée 203-275
Bering Sea, crustal structure: Pshennikov 198-204
Black Sea, crust, structure: Neprochnov 194-349; Savarenskiy 192-96
  isotopes, sulfur: Vinogradov 196-274
  radioactivity, sediments: Agamirov 202-258
  seismic surveys: Neprochnov 194-349
Borneo, continental drift: Fitch 202-122
Brazil, age, granites: Aldrich 197-17
  gravity surveys: Heanao-Londoño 193-227
  paleomagnetism, basalt: Creer 195-288
British Columbia, age, igneous rocks and metamorphic rock: Gordy 194-11; Hunt 194-12; Leech 194-10; Tipper 198-14
British Columbia—Continued
  geophysical surveys: Chapman 192-143
  isotopes, lead: Leech 197-234
  magnetic surveys: Canada Geological Survey 203-296
  seismic surveys, Salmon Glacier: Doell 197-340
British Guiana, age, dolerite: McDougall 202-11
  age, granite: Bowie 197-19
    Precambrian rocks: Snelling 202-12
British West Indies, earthquakes, 1961: Robson 192-46
Bulgaria, age, igneous and metamorphic rocks: Yordanov 201-17
  age, pegmatites: Alekseyev 201-16
  gravity, absolute value at Sofia: Petkoff 203-208
  seismicity, Kaliakra region: Kirov 196-113
  thermal springs: Petrov 201-222
Burundi, age, pegmatites: Monteyne-Poulaert 199-12

C

Calderas, classification of: McCall 195-350
California, age, general listing: Bushee 202-9
  age, igneous rocks: Hsu 200-15; Silver 200-13
    radiocarbon dates: Emery 196-8
    volcanic rocks: Dalrymple 200-14
  electrical logging, magnetite deposits: Zablocki 193-148
  geophysical surveys: Wells 197-157
  geotectonics, recent deformation: Whitten 194-187
  geothermal energy: Facca 193-238
  magnetic properties, serpentine: DuBois 194-275
  magnetic surveys: Andreasen 202-249; Henderson 201-306
  paleomagnetism, Cretaceous: Currie 198-258
  radioactivity surveys: Books 196-317; Sikka 198-290
Cameroun, age, granites: Gazel 200-21
Canada, age, general listing: Beall 202-10; Lowdon 198-11; Wanless 198-12
  age, glacial rebound: Lee 202-117
    igneous and metamorphic rocks: Burwash 200-18; Stockwell 198-13
    radiocarbon dates: Dyck 203-24; Gfeller 203-38
    tectonic activity in the shield: Stockwell 200-17
  crust and mantle, structure: Brune 196-257
  earthquakes, 1534-1927: Smith 194-69

Canada—Continued
  faulting, Precambrian: Byers 199-145
  geophysical surveys: Jenness 197-158; Oil in Canada 195-119; Roots 193-155; Seigel 199-124
  geophysical research, Department of Mines and Technical Surveys: Steenburgh 200-172
    Dominion Observatory: Beals 200-174
    Geological Survey:Morley 200-173
    Polar Continental Shelf Project: Steenburgh 200-175
  geotectonics, Richardson Mountain trough: Jeletzky 201-186
  glacial rebound, Hudson Bay: Lee 202-117
  magnetic field, observations: Caner 195-246; Loomer 202-203; Ross 195-245, 202-202
  paleomagnetism, Cretaceous: Larochelle 201-281
    Precambrian: Black 199-242; DuBois 198-259
  Upper Mantle Project: Oilweek 197-221
Caribbean Sea, crust, structure: Barr 200-101
Chile, earthquakes, 1960: Cloud 197-89; Clough 197-91; Duke 197-88; Housner 197-86, -90, -92; Robson 192-48; St.Amand 197-66; Segerstrom 201-67; Steinbrugge 197-87; Tillotson 192-47
  volcanic activity: Casertano 197-352; Tazieff 202-319
China, block faulting, mechanism: Chang 201-189
  earthquake, 1920:Petrushevskiy 194-72
  electrical surveys, buried granite surface: Yang 193-140
    oil exploration:Ivanov 193-139
  geotectonics, recent deformation: Lebedev 197-188
    review: Tuptisyn 200-195
  seismic surveys, Taichung: Ch'iu 203-324
    Tsaidam basin: Tseng 199-349
Christmas Island, geophysical surveys: Northrop 195-127
Chukchi,Sea, submarine geology, Barrow Canyon:Lepley 193-355
Colorado, age, granite: Boyer 194-9
  geophysical surveys: Case 197-205; Northwood 196-193
  geothermal gradient,shallow boreholes: Lovering 203-213
  gravity and magnetic surveys: Joesting 193-222
Colorado Plateau, age, uranium ore: Miller 202-8
Compaction, sand, experiments:Maxwell 195-333
Congo, age,pegmatites:Monteyne-Poulaert 199-14
  age, Precambrian rocks: Ledent 199-13
  geophysical research: Vander Elst 192-161
  gravity surveys: Evrard 203-206
Connecticut, magnetic surveys: Popenoe 197-277, -278,-279,-280
Continental drift, fossil flora: Axelrod 200-190
  South America:Morrison 199-146
  sudden displacement by continents: Ma 202-141
Continents, origin: Panov 193-173
Core, boundary and structure, geodetic data:Ledersteger 192-181
  boundary with mantle: Stishov 195-224
  composition, review:Zharkov 193-258
  convection: Braginskiy 200-237; Namikawa 197-223; Tverskoy 203-234, -235, -236
  density: Bullen 195-225
  earth tide data:Tomaschek 193-102
  elastic properties of outer boundary: Balakina 195-223
  elastic waves: Danes 197-124
  electrical currents, origin: Chatterjee 193-265
  equations of state:Birch 202-190
  growth, age: Runcorn 193-256,199-202
  ionic state: Cagniard 193-257
  liquid state, nutation of Earth's axis: Popov 201-231
  rigidity, oscillations of earth: Takeuchi 196-268
  state of iron, magnetic field:Wiess 199-213
  viscosity, effect on seismic waves: Zharkov 199-66
Correlation, concept analyzed: Kunetz 192-164
Cosmic dust, accretion by earth: Florenskiy 200-58; International Geophysical Year Bulletin 193-38
  California desert:Fredriksson 199-33
  collecting techniques: Soberman 201-37
  cometary debris: Beard 202-35
  distribution near Earth:Dole 200-62; Dubin 196-49, 201-41; Fesenkov 196-50; Hodge 196-48; McCracken 201-35; Moroz 196-53; Nazarova 196-51; Pskovskiy 199-35;Ruskol 196-52; Shapiro 203-47; Soberman 201-36; Southworth 202-34
  France: Grjebine 201-42
  origin: Best 193-41; Soberman 201-39; Whipple 196-47

Cosmic dust—Continued
  radioactivity: Wasson 203-46
  recognition: Fredriksson 199-34
  review: Parkin 194-46
  size and shape: Hemenway 201-38
  space probe measurements: Cohen 193-39; Dubin 193-43; LaGow 193-43; Nazarova 192-28, -29, 193-40, -44, 201-40
  rate of sedimentation: Utech 201-43
Cosmic spherules, rate of sedimentation: Utech 201-43
Cosmogony, matter-antimatter annihilation: Alfvén 197-34
  selective escape of gases: Öpik 201-28
  solar system, origin: Cameron 192-12
Craters, Australia: Crawford 200-176
  explosive yield calculated: Hess 194-59
  laboratory tests, sandstone: Moore 194-58
Creep, ice, long-time deformation: Hobbs 202-304
  ice, mechanism: Weertman 202-299
  limestone, hydrostatic pressure: Robertson 195-336
  rocks, general discussion: Iida 202-294
    high pressure: Matsushima 202-295
Crust, age: Shukolyukov 195-1
  basaltic, magnetic properties: Bulmasov 193-250
    nature of: Krishnan 203-230
  circumpacific area, Tb/U ratios: Gottfried 198-195
  composition, seismic and volcanological evidence: Francalanza 202-182
    velocity characteristics: Pomerantseva 196-261
  deep drilling, U. S. S. R.: Belyayevskiy 202-178
  deep earthquakes, large structures: Rudich 202-119
  deep seismic sounding: Belousov 194-312
  discontinuities, origin: Borchert 194-221
  evolution: Borisov 198-149
  granitic layer, high density lower layer: Bott 198-205
  North America, quartz diorite line: Moore 198-196
  origin: Bondarchuk 198-194
  orogeny, alpine serpentines, oceanic rind: Dietz 202-173
  pulsations, solar activity: Tamrazyan 196-140
  seismic waves, dynamic properties: Alekseyev 194-100
    primary: Pomerantseva 194-314
  sima layer, origin: Sobolev 201-225

Crust—Continued
  study of, methods: Peyve 196-259
  thermoelastic stresses: Lyubimova 201-224
  thickness and structure, Algeria: Mechler 195-103, 196-171; Merlet 196-258
    Alps: Behnke 193-241; Closs 193-239; Fuchs 193-242; Morelli 193-240
    Antarctica: Evison 201-229; Woollard 202-181
    Arctic Ocean: Ostenso 195-342, 201-227; Pěč 192-243
    Asian paths: Sikharulidze 198-197
    Asia-Pacific transition zone: Aver'yanov 194-350, 198-202
    Bering Sea: Savarenskiy 192-98
    Black Sea: Neprochnov 194-349; Savarenskiy 192-96
    Canada: Brune 196-257
    Caribbean Sea: Barr 200-101
    conference in 1962: Riznichenko 202-171
    continents: Weertman 196-212
    determined from near earthquakes: Tvaltvadze 198-192
    Finland: Penttilä 202-176; Saastamoinen 202-177
    Germany: Dohr 193-244
    gravity anomalies: Galushko 193-200; Woollard 202-155
    gravity effects: Sazhina 193-189
    Greece: Taner 195-213
    Hawaii: Eaton 202-313
    Indian Ocean: Neprochnov 195-216
    Italy: Di Filippo 193-245
    Japan: Aki 196-256, 203-104; Kaminuma 201-228; Matsuda 195-217
    Kurile-Kamchatka Arc: Gal'perin 198-203
    Maine: Steinhart 197-219
    Mid-Atlantic Ridge: Talwani 198-183
    New Mexico: Norden 202-175; Stewart 195-97
    New York-Pennsylvania: Dorman 194-220
    New Zealand: Reilly 195-203
    oceanic areas: Den 201-226
    Pacific Ocean: Ewing 202-179; Pshennikov 198-204; Santo 196-265
    Peru: Steinhart 197-219
    petrographic evidence: Afanas'yev 197-220, 202-183
    Puerto Rico Trench: Northrop 192-337
    review: Closs 193-243
    seismic measurement: Treskov 198-193
    Sweden: Båth 192-241
    traveltime curves: Green 195-64
    U.S.S.R.: Ali-Zade 200-235; Antonenko 200-219; Arkhangel'skaya 192-242; Balavadze 198-199; Belyayevskiy 202-178;

- Crust—Continued
  - thickness and structure—continued
    - U.S.S.R.: Borisov 196-260; Bulmasov 193-250; Butovskaya 194-351; Davydova 194-342; Donabedov 194-348; Fomenko 194-340; Gal'perin 194-347; Godin 193-248, -249, 198-200; Golenetskiy 198-201; Kazanli 194-341; Khalevin 199-194, -195; Kosminskaya 199-196; Krestnikov 196-264; Litvinenko 194-344; Panasenko 195-214; Pashutina 194-346; Rezanov 195-215; Shaposhnikov 193-247; Shcherba 196-262; Shechkov 193-246; Tagay 194-352; Tatevosyan 199-193; Trebukova 194-345; Ulomov 196-263; Yegorkin 194-343
    - United States: Aki 196-256; Smith 195-98
    - Yugoslavia: Roksandíc 193-230
  - ultra-high pressures in: Jamieson 203-326
  - viscosity: Cook 200-236
- Cryptovolcanic structures, not of impact origin: Bucher 199-36
- Cyprus, gravity anomalies: Gass 202-158
- Czechoslovakia, age, igneous rocks: Smejkal 192-7
  - age, pitchblende: Borucki 201-15
  - electrical surveys, location of boreholes: Kaspar 192-137
  - magnetic surveys: Homola 193-301
  - paleomagnetism, hydrothermal veins: Krs 203-274
  - seismic surveys, Oligocene basin: Beránek 194-336

D

- Deformation, brittle-fracture to ductile-flow transition: Heard 195-335
  - calcite aggregates, recrystallization: Griggs 195-331
  - carbonate rocks, Creep: Robertson 195-336
    - high temperature and pressure: Rozanov 199-355
  - flow, theory of: Jaeger 196-339
  - folding, geometry of: Flinn 196-340
  - fracturing, theory of: Jaeger 196-339
  - ice, mechanism: Gold 201-357
    - rectangular tunnel: Roethlisberger 202-303
  - length changes, secondary: Paterson 195-339
  - marble, changes in strain rate: Heard 198-345
    - tortion under confining pressure: Handin 195-337
  - nutation of earth as cause: Stovas 195-145

- Deformation—Continued
  - plastic, faulting: Odé 195-338
    - internal: Patalakha 201-356
  - porosity, effect on: Gonor 199-353
  - rocks, 500°C range: Griggs 195-332
    - high velocity impact: Attewell 200-348
    - method of study: Rebinder 196-345
    - various pressures: Volarovich 196-344
  - sand, cataclastic flow: Borg 195-334
  - sedimentary rocks, pore pressure tests: Handin 200-342
  - stress field, anisotropic minerals: MacDonald 195-329
    - mineral orientation: Brace 195-330
- Delaware, magnetic surveys: Henderson 199-263
- Density, rocks, Germany: Kopf 192-235, 203-209
  - rocks, gravity interpretation: Matsuzawa 192-236
    - U.S.S.R.: Krinari 195-199
- Density log, review: Pickell 198-308
- Devon Island, geophysical surveys, 1960-64: Greenhouse 200-150
- Dipmeter logs, electronic analog computers: Braun 198-128

E

- Earth, age: Starik 195-2
  - asymmetry, tetrahedral hypothesis: Carey 203-173
  - atmosphere, history: Holland 197-169
  - axis of rotation, primeval equal geomagnetic Gauss axis: Dauvillier 197-33
  - critical angles: Líchkov 196-203
  - figure, determination: Molodenskiy 192-174; Monin 202-113
    - eccentricity of the magnetic field: Barta 198-217
    - ellipsoid calculated: Burša 200-185
    - ellipticity of the equator: Izsak 193-168
    - equilibrium: James 200-184; Ledersteger 192-181
    - flattening: Ledersteger 192-180
    - formulas compared: Marych 194-179
    - gravity data: Bjerhammar 192-176
    - Migal's theory: Monin 194-178
    - satellite measurement: Kopal 197-172; Schmid 202-111; Zhongolovich 195-140
    - third-order theory: Lanzano 197-173
    - triaxiality: Uotila 198-165
  - interior, convection currents: Kopal 200-233
    - deformation: Jain 200-232
    - density distribution: Jobert 192-240

Earth—Continued
  interior—continued
    general discussion: Krishnan 196-255; Stoneley 192-239
    high-density silica: Stishov 197-217, -218
    rheology: Gutenberg 194-109
    study of: Shcherbakov 197-216
  internal electrical constitution: Cagniard 193-257
  layered structure, origin: Vinogradov 196-254
  mass, calculated: Caputo 202-147
  origin, low temperature accretion: Urey 194-24
  poles, motion in IGY and 1959: Fedorov 193-104
  rotation, meteorite impact effect: Dachille 199-129
    variations: Sidorenko 203-118
  structure, long period Love waves: Kovach 194-103
  surface, presedimentary evolution: Benesh 196-70
  thermal history: Runcorn 202-163
  thermal state: Crowe 194-218
Earth currents, 0.5—100 frequency range: Vladimirov 196-99
  anisotropy, Japan: Rikitake 200-76
  artificial, distribution: Kovalevskiy 201-66
  aurora: Flock 203-63
  Barents Sea: Fonarev 200-82
  coast effect: Glebovskiy 199-56
  crust and upper mantle: Weise 192-43
  exploration, correlation: Berdichevskiy 200-81
    ellipse determination: Verö 198-52
    France: Martel 203-64
    interpretation: Li 201-60; Roy 199-47
    limitations of methods: Srivastava 201-64
    nonhorizontal mediums: Obukhov 199-52
    review: Berdichevskiy 198-42, 201-62
    Sea of Azov: Popov 199-55
    theoretical treatment: Wiese 197-65
    vector diagrams: Berdichevskiy 200-79
    vertical fault: Li 201-59
  geomagnetically conjugate stations: Mather 194-65
  industrial sources: Astrakhantsev 201-65; Rokityanskiy 202-51
  instrumentation, recording long-period variations: Aubert 194-67
Earth currents—Continued
  latitude variations: Sedova 199-51
  micropulsations, amplitude distribution: Rokityanskiy 203-66
    pearl-type: Heacock 192-42
  model experiments: Ádám 192-45, 198-50
  observations, France: Fournier 195-35, -36, -37
    Hungary: Chan 192-44
    Japan: Hasegawa 202-52; Kakioka Magnetic Observatory 195-44; Kondo 195-45
    Sweden: Rösler 196-103
    U.S.S.R.: Dubrovskiy 199-53
  oceans: Fonarev 199-54
  pt fluctuations at sea: Smirnov 196-100
  pulsations: Coulomb 192-276
  research review, Univ. of Alaska: Hessler 199-48
  S variations, magnetic equator: Hutton 200-74
  surveys, France: Fournier 203-65
    Hungary: Ádám 198-51
    U.S.S.R.: Kuznetsov 200-80
  tellurogram analysis: Moskvichev 198-45
  time-dependent, theoretical model: Rikitake 200-75
  time variations: Hasegawa 199-59
  topographic and geologic effect: Wescott 194-64
  variations, Arctic and Antarctic: Troitskaya 195-41
    Ghana: Hutton 194-66
    Japan: Rikitake 200-77
    Spitzbergen: Nikitina 195-43
    U.S.S.R.: Kebuladze 195-39 Okhatsimskaya 195-40; Zubareva 195-12
  vertical component, field study: Vinogradov 198-48
Earthquakes, accelerations: Shaginyan 203-76
  aftershocks, Aleutian Arc: Duda 194-77
    distribution: Goto 201-78; Solov'yev 200-93
    Japan: Asada 203-83; Earthquake Research Institute 203-81; Mogi 193-84
    strain release pattern: Duda 203-77
    U.S.S.R.: Pshennikov 194-79
  Alaska, 1788-1961: Davis 194-68
  Antarctica, observations during 1957-58: MacDowall 197-70
  British West Indies, 1961: Robson 192-46
  Canada, 1534-1927: Smith 194-69
  Chile, 1960: Robson 192-48; St. Amand 197-66; Segerstrom 201-67; Tillotson 192-47

Earthquakes—Continued
  China, 1920: Petrushevskiy 194-72
  data processing: Phinney 198-68
  deep-focus zone, Pacific Ocean: Andreyev 202-57
  destructive, recording of ground motion: Hudson 197-93
  displacement, intensity of 7-8: Medvedev 197-97
    near points: Latynina 199-64
  energy: Belotelov 197-87,193-76
    U.S.S.R.: Aronovich 202-60; Fedotov 203-73
  engineering, Chile 1960: Cloud 197-89; Clough 197-91;Duke 197-88; Housner 197-86, -90, -92; Steinbrugge 197-87
    computers: Begiyev 203-92
    conference in 1960: Zabriyev 203-86
    coupling effect: Sato 192-93
    damage to structures: Blume 197-94; Kanai 203-84
    earthquake-proofing of buildings; Medvedev 197-95
    limiting resistance of structures: Sinitsyn 203-93
    stress calculation: Derkachev 203-90
    vibration of buildings: Sinitsin 197-98
  epicenters, determination: Kochetkov 201-79; Masarskiy 192-81; Pyatetskiy-Shapiro 203-72
    geological indications: Solonenko 196-117
    initial motion, Japan: Seki 202-63
  fault plane solutions: Fara 203-78; Haskell 198-69;Tárczy-Hornoch 197-85
    compared with surface dislocations: Keylis-Borok 196-123
    computer program: Kasahara 196-122
    orthogonalization: Schäffner 193-80
    P and S initial motions: Ritsema 193-77
  Fennoscandia, 1891-1950: Båth 194-70
  Flores Sea: Northrop 198-61
  focal depth, determination:Shebalin 192-83
  focal energy, intensity at epicenter: Medvedev 192-88
  focuses, distribution in Taiwan region: Lee 201-72
  France, Quaternary: Grangeon 198-64
  free oscillations of the earth: Caloi 199-67;Caputo 192-94; Jobert 197-122;Pekeris 200-97; Takeuchi 195-88

Earthquakes—Continued
  frequency, prediction: Aki 203-75
    swarms: Tanaka 193-85
  general review: Rousseau 195-46
  ground deformation: Kats 193-87; Medvedev 203-88
  ground tilt, before and after shocks: Nishimura 195-57
    U.S.S.R.: Karmaleyeva 198-72
  ground vibrations,U.S.S.R.: Puchkov 197-96
  Hawaii, 1959: Eaton 203-67
  hypocenter location: Gunst 198-67; Miyamura 200-88
  intensity, determination:Medvedev 192-82
  Iran, 1957: Peronaci 192-50; Ambraseys 203-68
  Japan: Yasui 192-54
    1900 and 1962: Onda 196-109
    1923: Busch 198-60
    1951-60: Katsumata 192-100
    1961: Aki 195-54; Kagoshima Local Meteorological Observatory 193-65; Kishinouye 193-67; Kushiro Local Meteorological Observatory 193-66; Okada 195-53;Quarterly Journal of Seismology 192-53; Sakai 192-51
    1962: Hagiwara 196-10; Okada 196-111; Sato 196-108; Sendai 196-107
  magnetic field of the earth, interrelationship: Yoshimatsu 195-240, 202-204
  magnitude, calibrating functions for body waves: Vanek 192-85
    determination: Shebalin 192-83
    equation for shallow shocks: Bisztricsány 193-74
    formulas: Bóbr-Modrakowa 193-75; Solov'yev 192-86
    frequency distribution: Kurimoto 195-58
    macroseismic determination: Galanopoulos 193-73
    station correction: Pasechnik 196-169
  magnitude-frequency relation: Miyamura 192-84; Mogi 200-89, -90; Tsuboi 203-74
  mechanical properties of rocks: Iida 202-64
  mechanism: Aver'yanova 196-119; Berchkemer 194-76; Scholte 192-103; Stauder 199-63
    Alaska: Stauder 196-118
    Aleutian Arc: Schäffner 194-78
    Antarctica: Hatherton 196-121
    couples without moment: Ingram 203-79
    creep deformation: Orowan 195-59
    discussion: Honda 198-71, 203-80

Earthquakes—Continued
  mechanism—Continued
    discussion: Matsuzawa 195-62
    dislocation theory: Teisseyre 193-81
    Hindu-Kush-Mediterranean region: Sobuti 201-71
    Japan: Ichikawa 202-61;Mikumo 196-120
    laws of fracturing: Fridman 196-124
    Mediterranean: Di Filippo 192-89
    nature of faulting: Griggs 195-60
    New Zealand: Adams 202-62
    radiation mode of S-waves: Kasahara 198-70
    Rayleigh wave method of study: Aki 193-83
    Rumania: Constantinescu 193-82
    U.S.S.R.: Shirokova 195-61
    volume source: Scholte 193-78
  Missouri, 1963: Stauder 200-84
  Montana, 1959: Christopherson 193-64; Witkind 200-85
  Morocco, 1960: Choubert 198-58; Debrach 198-56; Dubourdieu 199-60; Erimesco 198-57; Rothé 195-48
  motion, spectrum: Kanai 203-85; Muramatu 201-76
    vibrational characteristics: Muramatu 201-77
  Nevada, 1954: Slemmons 200-86
  New Mexico, microearthquakes near Socorro: Sanford 193-63
  observatories, Seismic Research Group in Edinburgh: Willmore 193-98
    U.S.S.R.: Kirnos 192-90
  ocean floor, recording: Prentiss 203-69
  Oregon, 1841-1958: Berg 196-104
  periods, distribution analysis: Tanaka 200-92
    magnitude dependence: Kanai 200-91
  Peru, San Agustin fault system: Rodriguez 193-79
  prediction, U.S.S.R.: Savarenskiy 199-65
  recognition, nuclear explosions: Press 200-99
  recurrence, experimental study: Gurevich 196-114
  response spectrum: Arias S. 198-73; Wiggins 193-97
  seaquakes: Northrop 198-61
  South Dakota, 1961: Agnew 195-47
  strain release, microshocks: Watanabe 201-74, -75
  stress determinations, computer program: Khachiyan 203-91
  stress fields, Pacific Ocean seismic belt: Balakina 197-84

Earthquakes—Continued
  swarms, Japan: Yasui 202-58
  Tanganyika, 1959: Haldeman 192-49
  tsunami: Stavrovskiy 195-78
    Chilean earthquake of 1960: Hisamoto 192-92
    Japan: Nakano 194-82;Watanabe 202-65
    Okinawa: Taneda 194-81
  U.S.S.R., 1957: Solonenko 195-52
    1958: Fedotov 194-71;Tokarev 197-69; Treskov 198-59
    1959: Misharina 195-50; Pshennikov 195-51; Vvedenskaya 197-68
    1961: Yeres'ko 202-54
    review: Savarenskiy 192-58,197-77
    Turkmen-Khorasan Mountains: Rezanov 195-56
  United States, 1959: Eppley 200-83
    1960: Talley 198-54
    19th century: MacCarthy 198-55
  volcanic, mechanism: Mogi 203-359
  volcanic activity, prediction of: Blot 203-339
  water load of rivers, Mississippi Valley: McGinnia 201-73
  weak, instrumental study: Koridalin 192-59
Earth tides, computer analysis: Seifers 203-128
  crustal pulsations, solar activity: Tamrazyan 196-140
  deformation of earth under load, Green's function: Longman 195-80
  earth-moon system: Ruskol 201-89
  earth's rotation,friction effect: Slichter 202-74
    secular retardation: Pariyskiy 196-135
    variations in: Bryzzhev 196-136; Pavlov 196-137
  free oceans, effect on horizontal component: Groten 199-71
  general discussion: Darwin 193-164
  German Geodetic Research Institute, review of research: Kneissl 193-103
  gravimeter, astatic long period: Zadro 192-60
    calibration at Moscow:Dobrokhotov 201-97
  gravimeter and horizontal pendulum data compared: Melchior 196-133
  gravity exploration: Mudretsova 202-77
  gravity variations, spectral analysis: Blum 194-90

Earth tides—Continued
  harmonic analysis: Balenko 203-123, -124; Matveyev 203-122; Venedikov 196-134
  horizontal pendulums, calibration: Pícha 200-107
    sensitivity: Pícha 192-101
  inner core, structure of: Vicente 202-75
  internal structure of earth: Pariyskiy 201-88; Tomaschek 193-102
  nuclear explosions: Balakrishna 194-92, 197-107
  observations, Belgium: Melchior 201-90
    Germany: Groten 201-91
    India: Balakrishna 201-98
    International Geophysical Year: Harrison 198-87, -88
    Italy: Norinelli 193-99, -100
    Poland: Dobrzycka 197-106
    U.S.S.R.: Dobrokhotov 201-92; Latynina 199-72; Ostrovskiy 195-84, 201-94, -95, -96 Pariyskiy 195-81, 201-93
  observatories, Trieste: Norinelli 193-101
  outer core, elasticity of: Vicente 202-76
  planetary forces: Stovas 196-138
  recording, scale coefficients: Pertsev 195-82
  strain seismometer, Freiberg: Hiersemann 194-91
  stratified sphere, deformation: Caputo 193-109
  vertical acceleration, correction for: Pariyskiy 195-83
Egypt, age, radiocarbon dates: Fairbridge 196-14
  magnetic properties, iron deposits: Vogelsang 192-293
  radioactivity, black sands: Zaghloul 194-293
El Salvador, seismicity: Boletin Sismológico del Servicio Geológico Nacional de El Salvador 197-74
Elastic properties, basalt, Experimental Mohole 7: Somerton 196-164
  basalt, India: Balakrishna 203-139
  calcite-aragonite transition: Ahrens 195-92
  granular mediums: Nagumo 199-78, 202-85
  ice: Anderson 201-112; Langleben 193-348
  limestones: Nikitin 194-113; Peselnick 193-114
  modules of elasticity, stress relief cores: Fitzpatrick 196-166
  nepheline: Ryzhova 200-120
  porous media, liquid filled: Deresiewicz 203-137
  rock salt: Carroll 194-116
Elastic properties—Continued
  rocks: Belikov 199-81; Kobranova 203-164; Nicholls 200-118; Woeber 203-140; Yemelin 199-80
  See also Elasticity
Elastic waves, air-blast coupling: Jones 203-136
  amplitude, piezophotographic measurement: Vaněk 192-108
  amplitude coefficient: Lossovskiy 201-106
  anisotropic medium: Backus 193-105; Osipov 201-105, 203-132
  attenuation, experiments in rock: Howell 193-115
    heterogeneous medium: Yoshiyama 196-149
    nuclear explosions: Werth 198-99
    porous media: Wyllie 195-85
    ultrasonic waves: Levykin 199-79
    velocity relationship: Vasil'yev 200-112
  axially symmetric source, elastic half space: Mitra 199-76
  body, nuclear explosion detection: Keylis-Borok 194-120
  core of earth: Danes 197-124
  decoupling effect, spherical cavity explosion: Brode 200-121; Kisslinger 200-123
  diffraction: Ishii 202-86
    first motion approximations: Gilbert 197-110
    head waves compared: Oblogina 194-98
    rough surfaces: Abubakar 197-116
    vertical contact: Kun 195-90
  dispersive, attenuation: Futterman 194-94; Lamb 194-93
    porous mediums: Kats 198-93
  displacement amplitudes, vertically layered medium: Kharchenko 193-111
  displacement potentials: Tazime 201-99
  dynamic properties, crust: Alekseyev 194-100
  electromagnetic waves, similarities in wave guides: Kalinin 203-135
  explosions, amplitudes: Båth 192-116
    traveltime curves: Masarskiy 202-90
  first arrivals, nuclear explosions: Beaufils 196-172
  floating ice sheet: Dutta 199-83
  focal mechanism: Scholte 192-103
  fracturing, heterogeneous material: Mogi 193-118
  free modes, layered oblate planet: Caputo 196-141
  G-waves, generation: Mal 201-104
  head waves, curvilinear discontinuities: Voronin 194-99
    frequency analyzer: Averko 194-111

Elastic waves—Continued
  head waves—continued
    layer of finite thickness: Levin 194-97
    refracting beds: Dunkin 203-129
    shape: Dix 193-108
    thin layers: Molotkov 203-133
  homogeneous elastic sphere:Sato 202-78, -79, -80, -81
  horizontally polarized shear wave, underground explosions: Randall 194-106
  initial motion, azimuthal character: Sato 200-110
  interference reception, random functions: Nakhamkin 197-114
  isotropic half space, induced at surface: Kogan 203-134
  Jeffreys' model of earth: Takeuchi 201-101
  Lamb's problem: Bershteyn 199-77
  layers, multiple arrivals: Gutdeutsch 193-110
  leaking modes: Bhattacharya 202-87
  line source, irregular surface: Abubakar 196-146
    surface motion: Abubakar 196-145
  longitudinal, upper mantle: Riznichenko 201-108
    velocity in clastic sediments: Kozlov 194-117
  Love, corrugated surface of earth: Mal 196-155
    dispersion curves: Bhattacharya 201-103
    frequency equation: Mal 197-123
    heterogeneous spherical earth: Kovach 194-103
    inversion of dispersion: Knopoff 196-143
    layered medium:Dutta 199-73
    mantle structure: Anderson 200-108
    reflection from rigid obstacles: Ghosh 196-154
    surface layer of variable thickness: Sato 194-104,200-116
    visco-elastic stratified layer: Kanai 195-87
  model studies: Tiksöz 197-125
    cement rock: Gil'bershteyn 198-96
    defraction and refraction: Lavergne 193-112
    faults: Rogoza 201-110
    mode waves: Honsho 192-115
    plates of varying thickness: Suzuki 196-161
    perforated materials:Gil'bershteyn 193-113,198-95,Ivakin 201-109, 203-141
    seismoscope: Bol'shikh 199-84

Elastic waves—Continued
  multiply refracted and reflected, oceans: Zverev 194-108
  nonstationary, distortion during recording:Malinovskaya 194-110
  normal mode oscillations of earth: Iyer 193-120
  nuclear explosions: Saha 193-121, Smith 198-100
    GNOME shot: Carder 195-94
    salt beds: Carder 194-121
    traveltimes and amplitudes: Romney 195-101
  P and S: Gilbert 192-104
  P-waves, crustal reflection: Haskell 194-95
    nuclear explosions: Doyle 197-127
  Pg, energy: Hankins 195-102
  plane acoustic, stratified medium: Kunetz 197-117
  plane boundary, transmission across: Deresiewicz 196-153
  propagation, elastic rods and plates: Miklowitz 197-112
    geometrical methods: Keller 197-108
    marine sediment: Bose 197-121
    medium composed of discrete particles: Katz 192-112
    oblique: Scholte 196-144
    Rayleigh scattering: Miles 197-111
    reverse problem: Alekseyev 196-159, -160
    rotating earth: Backus 192-110
    thermoelastic body: Paria 192-113
    transversely inhomogeneous medium: Lock 198-90
    two-dimensional model: Chowdhury 198-92
  quarry blasts: Bolt 197-129
  Rayleigh, absorption: Yegorov 194-105
    effect of firmo-viscosity: Caloi 196-158
    generated by stress discontinuity: Nag 196-157
    half space with sinusoidal interface: Kuo 192-109
    prestressed medium: Flavin 192-114
    radiation pattern: Haskell 199-74
    transition to sound waves: Hamada 201-100; Tazime 195-89
    transversely isotropic medium: Dutta 197-120
    two-layer heterogeneous medium: Dutta 198-89
    two mediums of cubic anisotropy: Osipov 192-111
  reflected, amplitude maximum: Cerveny 192-107
    coefficients:Bortfeld 196-152; Koefoed 196-150

- Elastic waves—Continued
  - reflected—continued
    - corrugated surface: Asano 195-86
    - dynamic relation to head waves: Yepinat'yeva 193-107
    - layered medium: Gryn' 194-101
    - nonrigid contacts:Pod''yapol'skiy 202-88
    - thin layer: Krauklis 200-111
  - refracted, corrugated surface: Asano 195-86
  - scattering: Yamakawa 202-82,-83
  - sea ice: Ishida 199-82
  - SH, clay overlying elastic material: Bhattacharya 197-118
    - moving source: Nag 194-96
    - reflection and refraction: Abubakar 196-147, -148
    - source in lower crust: Jeffreys 203-131
    - spherical layers: Buldyrev 200-113
    - torque in layered solid: Pekeris 196-142
    - wedge-shaped medium: Hudson 203-130
  - shear, velocity in mantle: Sykes 194-102
    - velocity measurements:Jamieson 200-117
  - shock wave propagation: Duvall 192-105
  - small explosions:Sima 202-89
  - sound velocity, sea: Narayana Rao 196-165
  - spectrum, ripple shots in quarry: Willis 196-173
  - spherical compressional, reflection and refraction: Bortfeld 196-151
  - supercritical reflections, continental crust: Kosminskaya 193-123
  - surface, attenuation: Kalinin 200-114
    - explosions: Jones 198-101
    - nuclear explosions: Brune 203-146
    - small explosions:Kuz'mina 203-143
  - SV-waves, crustal reflection: Haskell 194-95
  - synthetic sandstone: Stephenson 195-93
  - torsional oscillations of the earth: Caputo 194-107; Jobert 197-122
  - traveltime function: Weber 197-119
  - traveltimes, mantle: Bullen 193-106; Kogan 193-122
    - nuclear explosions: Jeffreys 196-168
  - underwater shots, measurement: Willis 203-145
- Elastic waves—Continued
  - velocity, calcite-aragonite transition: Ahrens 195-92
    - charnockite: Balakrishna 194-115
    - effect of granular texture: Ramana 203-138
    - formation fluids: Petkevich 193-116
    - halite: Weart 195-95
    - ice: Brown 192-348
    - instrumentation: Warner 203-142
    - liquid-saturated porous mediums: Petkevich 193-117
    - perforated model: Gil'bershteyn 198-94
    - pyrite: Hirasawa 198-97
    - quartzites and limestones: Ramana 194-114
    - rocks: King 195-91; Volarovich 201-111
    - schist: Hirasawa 198-97
    - vicinity of focus: Weber 196-156
  - wave fronts, stratified medium: Loeb 199-75
  - Zoeppritz' amplitude equations: McCamy 192-106
  - See also Seismic waves
- Elasticity, Cagniard's method, reflection seismology: Dix 197-109
  - crack propagation, glass plates: De Noyer 196-162
  - crystalline mediums: Laval 200-119
  - dislocations, movement of: Weertman 201-107
  - equations of motion, homogeneous bodies: Usami 201-102,202-84
  - finite strain, theory of: Knopoff 200-109
  - heterogeneous spheres, free oscillations: Takeuchi 195-88
  - modulus, variation with depth:Shan'gin 197-126
  - piezotransformer, calibration: Averko 194-112
  - rheology of the Earth's interior: Gutenberg 194-109
  - rocks, low frequencies: Usher 196-163
  - sea ice: Anderson 193-119; Brown 201-14; Langleben 201-113
  - sinusoidal curves, spectrum:Gratsinskiy 197-115
  - stratified sphere, deformation: Caputo 193-109
  - variation with pressure, ultrasonic determination: Silayeva 198-91
  - Young's modulus, dynamic and static: Nikitin 200-115
  - See also Elastic properties
- Elba, age, granodiorite: Eberhardt 196-19
- Electrical exploration, airborne, direct problem:Mizyuk 198-107

Electrical exploration—Continued

- airborne, methods: Shouval-Sergeer 192-130
  - sulfides in Canada: Morley 192-129
- alternating current, low frequency: Bulgakov 197-137
- analytical extension of fields: Strakhov 201-120, -121
- asbestos deposits: Artemov 200-135
- boundary-value problem: Glyuzman 199-87
- buried point source, vertical contact: Fokin 194-125
- charged elongated conductor: Rodionov 201-133
- conducting surface: Kamenetskiy 193-131
- Dar Zarrouk curves: Orellana Silva 200-125
- differential transformations: Rabinovich 193-134
- dipole field, distant zone: Gasanenko 197-130
  - horizontally layered mediums: Gasanenko 197-132; Kozulin 201-122
  - impedance: Gasanenko 197-133
  - thin conducting layer: Yanovskaya 195-109
- dipole sounding, crest of mountain: Khmelevskoy 200-129
  - multilayered isotropic medium: Vanyan 202-95
- direct current, layered mediums: Koroleva 199-88
  - perpendicular layers: Stefanescu 193-129
- disc-shaped electrodes: Bondarev 202-92
- earth-air boundary, polarized sphere: Tarasov 197-140
- electrical axis method: Mosetti 203-154
- electrode polarization: Bhattacharyya 202-91
- flat earth's surface: Shalayev 198-103
- formation factor: Yamaguchi 192-128
- ground water: Breusse 203-150, Köhsling 193-128; Mosetti 194-139
- grounded cable, field of: Sochelnikov 199-91
- group of polarized spheres: Tarasov 194-126
- harmonic dipole, multilayered medium: Gasanenko 192-124
- high frequency, methods reviewed: Tarkhov 194-130
- horizontal layered isotropic medium: Anishchenko 200-127
- induced polarization: Roussel 197-146; Van'yan 198-109
  - disseminated ores: Komarov 199-92

Electrical exploration—Continued

- induced polarization—continued
  - electrolyte activity: Keevil 195-104
  - ellipsoidal particles: Rösler 193-127
  - model study: Roussel 193-125
  - short d-c impulses: Nosske 192-122
- induction: Veshev 197-145
  - basic theory: Dmitriyev 194-122
  - compared with dipole method: Molochnov 197-135
  - complex ore bodies: Syun 196-183
  - electromagnetic fields: Velikin 202-96
  - generation of field: Dobrokhotova 198-104
  - helicopter: Shaub 193-130
  - regions with low resistivity blanketing deposits: Bezruk 194-131
  - relative measurements: Svetov 200-128
  - turbulent currents: Kaufman 198-108
- inhomogeneities, recognition: Veshev 194-124, 199-90
- instrumentation, automatic computing compensator: Mizyuk 199-95
  - cable-laying: Kochkurov 199-97
  - fast-acting switch: Kamenetskiy 199-96
  - Hungary: Ádám 196-185
  - low-frequency: Barkhatov 197-143
  - Poland: Kazimierczyk 201-138
- interpretation: Amalendu 199-47
- kernel functions, horizontally layered earth: Roman 199-85
- lightning, geology of places of striking: Bencze 192-123, 198-110
- low frequency: Blokh 202-99: Gasanenko 197-131
- magnetic susceptibility: Stadukhin 201-125
- mean gradient method: Bystritskiy 195-111
- membrane potentials: Kunori 192-127
- mining geophysics, U.S.S.R.: Tarkhov 202-98
- multilayered ground: Homilius 193-126
- natural electrical field, generation: Sveshnikov 194-172
- natural electromagnetic field, effect of fault: d'Erceville 195-105
- pegmatites: Volchek 200-136
- permafrost areas: Stozharov 199-93
- point source, at depth in three-layered medium: Korunova 201-128
  - at depth near vertical contact: Kononenko 201-130, 201-131
  - conducting layer: Krasnobayeva 201-132
  - near ideally conducting sphere: Korunova 201-129

Electrical exploration—Continued
  point source—Continued
    two-layered medium: Kononenko 201-127; Meyer 192-120
  position location: Pryakhin 199-89
  pulsating currents, combined methods: Kondratenko 198-105
  radiokip method: Tarkhov 195-110
  radiowave method: Dayev 203-152 Nikitina 202-94
    ground water: Myaskovskiy 202-97
    ore deposits: Gurevich 201-136
    sulfide deposits: Petrovskiy 200-134
  remote control switching: Zuyev 194-137
  resistivity, alternating current: Veshev 197-136
    anisotropy phenomena: Kailasam 196-178
    comprehensive review: Blokh 198-102
    curved discontinuities: Alfano 196-179
    differential sounding: Mosetti 203-153
    four-point configurations: Unz 201-118
    glacier ice: Meyer 197-147
    horizontally layered earth: Onodera 199-86
    kernel function: Onodera 192-125
    nomograms of standard equations: Scott 201-119
    radioactive minerals: Simič 194-132
    underground electrodes: Alfano 196-175
    vertical layers: Sakharnikov 197-138
  rotating field method, airborne: Shaub 202-93
  seasonally frozen ground: Leshchikov 193-135
  seismic surveying, shot-hole planning: Hermes 200-332
  seismoelectrical method, quartz veins: Mazanova 196-184
  self-potential, interpretation: Meiser 196-174
    pyrite and graphite: Ryss 197-141
    sulfides: Ryss 194-135
    vein deposits: Shibato 192-142
    watering of holes: Auzin 194-134
  strike and dip determination: Shemyakin 200-132
  subtraction of fields method: Rabinovich 193-137
  sulfides, deep-occurring: Semenov 197-139
  thermotelluric currents: Tuman 200-124
  three-dimensional body, average gradient method: Yakovlev 196-180
Electrical exploration—Continued
  three-electrode arrangement: Blokh 194-128
  transient field, ungrounded loop: Kamenetskiy 201-124
  tripotential method: Sarma 196-176, 200-126
  ultrabasic rocks: Tavrin 201-300
  unipole method: Gupta 203-149
  vertical electrical sounding: Glogovskiy 197-144; Kukuruza 200-131; Rabinovich 195-107
    anisotropy of four-layered sections: Dzhafarov 193-132
    calculating method: Van'yan 201-123
    depth to basement: Puchkov 198-106
    horizontally layered medium: Mal 196-177
    interpretation: Belelovskiy 200-133; Smol'nikov 194-127
    multilayered medium: Gel'fand 195-108
    ore bodies: Karmanov 201-313
Electrical exploration—See also Electromagnetic exploration
Electrical logging, bottom of drill hole: Dvorkin 199-113
  cables, locating breaks in insulation: Yakovlev 199-108
  calculation or reserves: Dakhnov 197-154
  carbonate rocks: Petrosyan 198-115
  clays, electrical anisotropy: Bedcher 194-157
  coal deposits, instrumentation: Gorbatov 198-121; Gryzlov 200-146; Popov 195-117; Sebestyén 198-310; Stepanov 193-150
    Ukrainian S.S.R.: Dem'yanovskaya 193-142
  combination: Doll 198-126
  computer program: Hoadley 192-141; Horn 201-165
  cycles in sedimentation: Safontsev 197-150, 198-131
  diffusion-adsorption potentials: Vendel'shteyn 197-151
  error determination: Komarov 195-116
  flow rate in boreholes: Gershanovich 200-140
  formation factor: Yamaguchi 192-128
  formation productivity: Granberry 199-103
  fracture permeability: Goryunov 198-114; Smekhov 194-158
  grid modeling: Al'pin 201-141; Kulinkovich 201-142
  ground water: Patten 202-100
  handbook: Pirson 198-112
  induction, coil design effects: Duesterhoeft 193-141

- Electrical logging—Continued
  - induction—Continued
    - collars: Al'pin 203-157
    - computer analysis: Zverev 201-140
    - nonhomogeneous mediums: Moran 194-154
    - ore deposits: Wagg 199-102
    - parameters of apparatus: Plyusnin 198-120
    - theory of: Kaufman 194-155
  - instrumentation, U.S.S.R.: Rivkin 201-145
  - interpretation: Hamilton 193-145
    - sandstone reservoirs: Wyllie 198-125
  - iron ores, U.S.S.R.: Garkalenko 199-111
  - jointed reservoirs: Smekhov 200-143
  - lateral microlog: Petrosyan 199-106
  - laterolog, nomogram: Sigal 199-109
    - residual oil saturation: Anpilogov 195-115
  - magnetite deposits, California: Zablocki 193-148
  - miniaturized equipment: Benjamin 194-159
  - ore deposits, U.S.S.R.: Kozyrin 200-142; Onin 198-124
  - paleogeographic constructions: Ulizlo 193-147
  - pore space, configuration: Orlov 199-112
  - porosity, determination: Vendel'shteyn 197-149
    - laterolog: Dakhnov 198-119
    - sandy-silty reservoirs: Logovskaya 201-143
    - sedimentary rocks: Manger 203-156
    - small gradient-sonde: Komarov 201-144
  - reference book: Dakhnov 194-153; 195-118
  - resistivity, core and logging data correlated: Roman 197-155
    - formation evaluation: Wilshusen 199-104
    - hydrophobic reservoirs: Boyarov 197-123
    - mechanical interpretation: Blakeman 193-143
    - permeability: Petrosyan 200-141
    - porosity and permeability: Guseva 196-189
    - pressure effect: Glumov 200-137; Orlov 200-138
    - screen effect of thin layers: Zhuravlev 201-146
  - salt deposits: Perkov 192-142
  - seismic shot holes: Kamata 201-147
  - self potential, coal deposits: Popov 198-118, 200-139
- Electrical logging—Continued
  - self-potential—Continued
    - correction charts: Segesman 194-156
    - permeability: Dement'yev 195-114
    - U.S.S.R.: Mikaelyan 198-122
  - sonic-resistivity plots: Lindley 193-144
  - spherical sonde: Honfi 198-113
  - stratigraphic traps: Slack 193-146
  - streaming potential: Gondouin 201-139
  - surveys, England: Bullerwell 196-190
    - U.S.S.R.: Alferov 194-164; Anpilogov 196-191; Bedcher 194-162; Belousova 202-101; Boyarskikh 194-164; Gunenko 194-160; Izhotova 199-105; Kazakova 198-116; Kravchuk 194-163; Rakhmanova 194-61; Sigal 198-117; Us 199-110
    - drill hole: Vasilenko 196-192
  - travel-mounted apparatus: Sokhranov 199-107
  - U.S.S.R., coal deposits: Brediknin 200-147; Pakh 200-145
    - gold deposits: Leman 197-152
    - methods evaluated: Kozhukhov 200-144
    - review: Komarov 197-153
- Electrical properties, basalt, Experimental Mohole 7: Somerton 196-164
  - clays, anisotropy: Bedcher 194-157
  - coal, resistivity: Toporets 193-152
  - conductivity, porous rocks: Mosetti 194-167
  - dielectric constant, function of pressure: Rudajev 193-151
    - function of temperature: Bondarenko 202-102
  - Earth: Watt 201-148
  - equivalent circuits for determination: Krylov 202-103
  - lightning nest, Austria: Fritsch 199-115
  - permafrost: Ananyan 194-168; Robertson 198-133
  - polarization capacity: Astrakhantsev 200-148
  - resistivity, saturated sand and clay sizes: Higdon 199-114
  - rocks: Kobranova 203-164
  - sodium carbonate and bicarbonate: Khitarov 198-134
  - sulfides and arsenides: Wintenberger 194-166
  - thermoelectricity, pyrite: Gilfillan 198-132
- Electrical surveys, Argentina, copper Elizalde 196-186
  - uranium: Jemma 195-311
  - Belgium, ground water: de Breuck 203-155
  - China, buried granite surface: Yang 193-140

Electrical surveys — Continued
  China—continued
    oil exploration: Ivanov 193-139
  Czechoslovakia, location of boreholes: Kaspar 192-137
  France, ground water: Denoziere 196-187
  Germany, Erzgebirge: Christoph 199-99
    soil: Roeschmann 193-138
    storage reservoir: Adler 192-143
  India, pyrrhotite: Paul 195-113
  Ireland, copper-lead: Hallof 194-138
  Italy, buried eruptive masses: Norinelli 193-299
    sulfur: Francaviglia 192-135
  Japan, granitic terrane: Baba 192-138
    ground water: Yamaguchi 192-140
    vein deposits: Otaki 192-139
    zinc deposits: Odani 194-145
  Korea, nickel deposits:Baag 200-300
  Poland: Tarass 194-140
  Quebec, Mattagami district: Pemberton 192-133
  Spain, caves and fissures: Sell Cantalapiedra 192-134
  Syria, water: Yastrebov 198-111
  Taiwan, Chiku sulfide mine: Mineral Survey Team of the Ministry of Economic Affairs 194-151
    Chinkuashih mine: Mineral Survey Team of the Ministry of Economic Affairs 194-146,-147, -148, -149
    sulfides at Wan-li mines: Mineral Survey Team of the Ministry of Economic Affairs 194-150
    Szehuangtzeping sulfide mine: Mineral Survey Team of the Ministry of Economic Affairs 194-152
  Texas, water: McFarland 192-132
  U.S.S.R., Caspian Sea: Sarkisov 199-101
    caves: Ogil'vi 194-142
    copper-molybdenum:Auzin 197-142
    Gay ore deposit: Rodionov 201-134
    gold lodes: Rogachev 194-143
    ground water: Ogil'vi 196-188
    Kazakh S.S.R.: Al'mukhanbetov 197-148
    landslide features: Trzhtsinskiy 194-144
    permafrost: Anishchenko 195-112
    potassium salts: Donchenko 199-100
    Russian platform: Kalenov 201-137
    Sakhalin: Kirichek 200-130
    sulfides: Gorodnitskiy 199-272; Gurevich 201-136

Electrical surveys — Continued
  U.S.S.R. — continued
    Techensk iron deposit: Astrakhantsev 201-135
Electromagnetic exploration, airborne, review: Pemberton 195-106
  diffraction, inhomogeneous sphere: Ben-Menahem 203-151
  dipole sounding: Bhattacharyya 201-117; Chetayev 193-136
  directional sounding: Molochnov 197-134
  geomagnetic field background: English 192-131
  instrumentation, slide rule: Gubkin 199-98
  low frequency, oil and gas: Mount 193-124; 199-94
  magnetic susceptibility: Stadukhin 201-126
  phase curves, depth to basement: Tikhonov 196-181
  pulse propagation: Wait 192-119
  radio-location method: Khmelevskoy 194-136
  spectrum analysis: Berbitskiy 193-133
  transient field, templates: Van'yan 196-182
  two-layered medium, resistivity determined: Enenshteyn 192-121
  U.S.S.R. Karelia: Artamonov 194-141
Elements, origin: Cameron 203-62
England, age, dolerite: Miller 203-9
  age, granite: Dodson 196-15
    uraninite: Bowie 197-19
  electrical logging surveys: Bullerwell 196-190
  paleomagnetism, Devonian: Chamalaun 199-243
  radioactivity logging surveys: Cosgrove 196-322
Eötvös, contributions to geophysics: Dombai 198-146
Eötvös balance, torsion coefficient: Norinelli 193-212
Eötvös-Schweydar torsion balance, instrumental constants: Norinelli 193-213
Epicenters, location from Pn waves: Herrin 195-99
Equation of motion, relativistic, variable mass: Oliveri 201-159
Equipotential surfaces, curvatures of Olberg 201-160
Estonia, meteorites, Igast: O'Keefe 192-26
Ethiopia, paleovolcanism: Mohr 202-336
Eurasia, geotectonics, recent movements: Nikolayev 195-179
Europe, age, igneous and metamorphic rocks: Vinogradov 196-21

Europe — Continued
  age — Continued
    radiocarbon dates: Kind 202-21
  exploration summaries, 1961: King 192-148
  geotectonics, recent deformation: Wernthaler 192-190; 194-189
  gravity surveys, Alpine zone: Artem'yev 194-215
    base networks: Kneissl 192-223
    Rome-Barcelona tie: Morelli 192-225
  mantle, seismic velocity: Tryggvason 193-253
  seismicity, 1959: Gryglewicz 193-69
    1960: Gryglewicz 193-68
Exploration summaries, Australia: Oilweek 200-167
  Burma: Kaufman 192-155
  Europe, 1961: King 192-148
  Far East: Kaufman 192-155
  Formosa: Kaufman 192-155
  India: Hotchkiss 192-154
  Indonesia: Kaufman 192-155
  Iran: Hotchkiss 192-154
  Iraq: Hotchkiss 192-154
  Israel: Hotchkiss 192-154
  Japan: Kaufman 192-155
  Mexico, 1961: Mina 192-144
  Pakistan: Hotchkiss 192-154
  Philippines: Kaufman 192-155
  Saudi Arabia: Hotchkiss 192-154
  South America, 1961: Sass 192-145
  Turkey: Hotchkiss 192-154
Explosion seismology, crustal studies: Stewart 195-97
  cratering experiments: Vortman 201-116
  efficiency of explosive charges: Roth 203-144
  GNOME explosion, ground effects: Carder 195-100
  linear charges: Carlson 201-115
  low-frequency seismic apparatus: Bulin 194-119
  quarry blasts, ripple firing: Willis 196-173
  U.S.S.R.: Yershov 192-117

F

Falkland Islands, paleomagnetism, Mesozoic: Blundell 201-285
Faulting, Canada, Precambrian: Byers 199-145
  Cabot fault system: Wilson 201-185
  dip-slip movement, San Gabriel fault in California: Paschall 192-199
  general discussion: Rosso 198-157
  induced by nuclear explosions: Hoy 203-148
Faulting — Continued
  limiting depths: Heard 195-335
  physical theory: Gzvovskiy 196-216
  plastic deformation, velocity discontinuity: Ode 195-338
  role in orogeny: Azhgirey 192-186
  transcurrent: Allen 193-181; Ridder 203-176
Fields, actual variations, integral characteristics: Guberman 202-110
Fiji, age, igneous rocks: McDougall 202-25
Finland, age, Precambrian rocks: Marmo 193-14; Simonen 197-22
  crust, thickness: Penttilä 202-176; Saastamoinen 202-177
  earthquakes, 1891-1950: Båth 194-70
  geodetic network: Kääriäinen 200-186
  geophysical surveys: Puranen 203-160
    chromite: Siikarla 196-195
    sulfide deposits: Laurila 203-300
  gravity surveys: Honkasalo 197-208
  seismic surveys, hammer seismograph: Huhta 203-322
  seismicity: Miyamura 202-53
Florida, magnetic surveys: Dempsey 202-238; Brown 192-336
  seismic surveys: Brown 192-336
Folding, drag, formation: Ramberg 200-344
  fluid dynamics: Ramberg 200-343
  intraformational recumbent, sandstones: McKee 193-349
  systematic diminution with time: Brochu 198-155
  unconsolidated sediments: McKee 193-350
Fracturing, rocks: Bagrintseva 201-167; Mogi 202-296
France, age, granite: Bonhomme 200-24; Despois 199-17; Faul 201-14; Graindor 196-18; Kaplan 199-16; Vialette 194-15
  age, lava flows: Pelletier 198-15
    migmatite: Graindor 196-17
    pitchblende: Durand 203-12
    uranium mineralization: Durand 196-16
    wood: Rudel 202-15
  earth current, exploration: Martel 203-64
    observations: Fournier 195-35, -36, -37
    surveys: Fournier 203-65
  electrical surveys, ground water: Denoziere 196-187
  geophysical surveys, syncline north of Caen: Dangeard 195-120
  isotopes, thermal waters: Fontes 197-225

- France — Continued
  - magnetic properties, dolerites: Bolfa 199-236
  - magnetic surveys, Jorat anomaly: Loriol 200-297
  - magnetotelluric surveys: Fournier 199-49
  - meteorites, Sainte Marguerite: Jérémine 194-27
  - radioactivity, granite: Roubault 193-308
    - gravels and source rocks: Stussi 193-309
    - rocks: Geslin 197-305
    - surveys: Coppens 193-317; Giret 196-318; Rothé 196-319, -320
    - uranium deposits: Jurain 200-306
  - seismic surveys, Gulf of Lions: Muraour 194-335; Schwaetzer 199-339
  - Saint Sorlin glacier: Belin 193-337
- French Guiana, radioactivity surveys: Hinault 200-313

G

- Galaxy, age: Churchhouse 196-41
- Galvanometers, theory of, electromechanical analogy: Kirzner 195-138
- Geodesy, boundary value problem: Arnold 192-169
  - Clairaut theory, peeling principle: Ledersteger 199-136
  - classical and three-dimensional: Levallois 203-167
  - deflection of the vertical, altitude networks: Hradilek 193-170
  - development in Germany: Kneissl 194-184
  - ellipsoid projected on sphere: Morozov 202-114
  - external boundary value problems: Brovar 203-172
  - potential surfaces of earth: Cook 192-171
  - Finland, network: Kääriäinen 200-186
  - geopotential height differences, Germany: Sigl 196-208
  - history of the science: Kneissl 194-184
  - International Association of Geodesy, activities: Heiskanen 192-173
  - ellipsoid, Vening Meinesz equations: Rapp 199-135
  - Krassovskiy ellipsoid: Isotov 201-169
  - leveling, Dover-Calais tie: Cartwright 194-181
  - mean sea level, determination: Doodson 194-180
  - new basic ideas (1962): Hirvonen 192-175
- Geodesy — Continued
  - orthogonal and normal heights, difference between: Lagrula 193-169
  - plumbline deflection, calculation: Monin 203-171; Schoeps 203-168
    - gravity data: Bokun 203-166
    - U.S.S.R.: Pellinen 196-209
  - quasi-geoid, effect of distant zones: Orlova 196-207
  - satellite studies: Kaula 196-210; Veis 139-167
  - spheroid, depth of lithosphere: Ledersteger 202-112
  - Stokes theory, accuracy of: Molodenskiy 192-168, 196-206
  - surveys, Spanish Sahara: Gantar 203-169
  - terrain reduction: Pellinen 192-198
  - textbook: Bomford 200-183
  - topographic surface, formulas for: Monin 203-170
  - Unified European Levelling Network, adjustment: Alberda 194-182
    - datum: Arnold 192-184
    - Germany: Kneissl 192-182, 192-183, 194-183
    - reference ellipsoid: Burša 203-165
  - United States, geoidal section: Rice 192-178
  - world system, gravimetric unification: Szabo 192-177
- Geoid, astrogeodetic determination, Poland: Kluss 192-179
  - derivation, Stokes' theorem: Vening Meinesz 192-170
  - integral equation for: Moritz 195-139
  - undulations, calculation: Heiskanen 192-172
- Geodynamics, principles: Scheidegger 201-171
- Geophysical anomalies, Carleman function: Voskoboynikov 199-128
- Geophysical exploration, airborne methods: Agocs 192-162; Carter 192-163; Dempsey 193-161
  - Appalachians: Howell 195-135
  - Alaska, 1960: Davison 194-170
  - anomalies, interpretation: Morelli 194-176
  - archaeology: Linington 197-171
  - Canada, 1962: Oil in Canada 195-119; Seigel 199-124
  - coal deposits: Burtsev 200-164
  - computer applications: Steenland 199-125
  - construction materials: Grigorovich 200-182
  - current stabilizer: Khomenyuk 199-130
  - depth determination, error analysis: Dzhafarov 201-168
  - fracture zones with basic dikes: Krutikhovskaya 199-116

Geophysical exploration—Continued
  Germany, methods: Stammberger 193-166
  granites, subdivision according to variety: Fedorenko 194-174
  ground water: Breusse 199-127; Shaw 202-109
  hidden ore bodies: Safronov 200-179
  information theory: Tarkhov 195-129
  inverse problem: Zidarov 196-200
  Italy, river channels: Norinelli 193-156
  mining: Breusse 197-167
  petroleum, evolution: Desaint 202-104
    methods: Buyalov 192-153
  polymetallic ores: Vigdorovich 200-152
  radio location: Feygel'man 199-134; Gurevich 199-133
  recent progress (1963): Bundage 201-164; Van Melle 201-162
  recording techniques, digital form for computers: Dobrin 196-202
  regional and local fields: Zidarov 196-201
  siderite and limonite: Sergeyev 200-153
  status of industry, 1962: Oilweek 192-167
  structural studies: Borisov 198-144
  sulfides, covered by detritus: Vigdorovich 196-198
  Sweden: Artamonov 192-151
  technical understanding, field geophysicists: Faust 200-168
  techniques reviewed: Gaskell 197-166
  trends as of 1962: Closs 195-132
  U. S. S. R.: Polyakov 198-145
    1959-65: Shirokov 200-178
    basement: Klubov 197-161
    geomorphology: Gvin 198-138
    methods: Shirokov 196-126; Yakzhin 200-177
    oil and gas: Borisov 196-199, 197-160; Kalinin 200-156
  Yugoslavia: Prosen 198-137
Geophysical logging, textbook: Lynch 200-170
Geophysical processes, collection of papers: White 195-133
Geophysical research, Andes Mountains: Tuve 201-163
  Canada, Department of Mines and Technical Surveys: Morley 200-173; Steenburgh 200-172
    Dominion Observatory: Beals 200-174
    Polar Continental Shelf Project: Steenburgh 200-175
Geophysical research—Continued
  Congo: Vander Elst 192-161
  Eötvös, contributions: Dombai 198-146
  high pressure techniques: Wentorf 201-166
  information theory, Kotel'nikov's theorem: Pochtarev 195-130
  international geophysical calendar: International Geophysical Bulletin 198-147; Shapley 197-170
  Italy, University of Trieste: Marussi 192-160
  Society of Exploration Geophysicists, meeting in 1962: Oilweek 192-166
  space science: Newell 193-162
  trend mapping, nonorthogonal polynomials: Mandelbaum 195-134
  Year of the Quiet Sun: International Geophysical Bulletin 192-157, -158, -159
Geophysical surveys, Africa: Makowiecki 202-105; Moody 192-146
  Alaska, Naval Petroleum Reserve No. 4: Woolson 200-149
  Antarctica: Nudel'man 198-142; Yoshikawa 199-122
  Arizona, uranium: Black 197-158
  Australia: Rudd 192-156; Thyer 199-123
  Barbados: Makowiecki 203-158
  Bechuanaland: Boocock 195-122
  British Columbia: Chapman 192-143
  Canada, 1962; Jenness 197-158
    Polar Continental Shelf Project: Roots 193-155
  California: Wells 197-157
  Christmas Island: Northrop 195-126
  Colorado, oil: Northwood 196-193
  Devon Island, 1960-64: Greenhouse 200-150
  Finland: Puranen 203-160
    chromite: Siikarla 196-195
    sulfide deposits: Laurila 200-300
  France, syncline north of Caen: Dangeard 195-120
  Germany: Hertwig 192-150
  Great Britain: Bullerwell 197-159
  Hungary: Balkay 198-136
  India: Rao 195-127; Roy 198-141, 199-121
  Indonesia: Deibert 203-161
  Kenya: Makowiecki 203-159
  La Sal Mountains: Case 197-205
  New Zealand: Rudd 192-156
  oil, 1961: Smith 194-169
  Oklahoma: McDaniel 198-135; Norden 193-153, -154
  ore deposits, 1961: Smith 194-169
  Poland: Bachan 201-151; Dabrowski 194-172; 201-149
    Carpathian Basin: Scheffer 196-194

Geophysical surveys — Continued
  Poland — Continued
    coal deposits: Skorupa 201-150
  Sarawak, bauxite: Wolfenden 200-166
  Spain: Instituto Geologico y Minero de España 195-121
  Tanganyika: Carter 192-147; Makowiecki 203-159
  U.S.S.R.: Fotiadi 198-139; Shcherbakov 192-152
    Angara River region: Savinskiy 195-125
    Azerbaijan S.S.R.: Baba-Zade 200-160
    Bashkir A.S.S.R.; Ovanesov 200-162
    bauxite: Babayants 195-124; Sukharina 200-165
    Caspian area: Yurchenko 197-163
    Caspian-Kuban area: Dzhafarov 193-160
    Caspian Sea: Kornev 199-117
    Central Asia: Dikenshteyn 200-157
    Cis-Ural downwarps: Khat'yanov 202-106
    copper deposits: Igoshin 202-108; Nikolayevskiy 200-151; Vinogradov 200-151
    Crimea: Lebedev 201-153
    Crimea and Kuban: Sollogub 193-158
    Dnieper-Donets Basin: Baranov 200-161
    ground water in mineral deposits: Ogil'vi 195-123
    iron deposits: Kovalevich 200-154
    Krasnodar Territory: Korotkov 200-158
    Krivoy Rog basin: Muromtseva 201-152
    Kursk Magnetic Anomaly: Chaykin 200-155
    rare metal intrusives: Shcherba 201-156
    Romashkino field: Begishev 200-163
    Rudnyy Altay: Ryss 196-197
    Russian platform: Podoba 201-154; Yurkova 201-155
    Russian platform and central Asia: Shiryayev 194-173
    Sahkalin Island: Milashin 198-140
    Sea of Azov area: Lebedev 193-159
    Siberia: Fotiadi 197-164; Rozenberg 199-120
    Trans-Urals: Khalevin 201-157
    Ural-Volga area: Klubov 196-196
    Ust-Yenisei basin: Kislev 199-119
    Ustyurt Plateau: Ishutin 199-118

Geophysical surveys — Continued
  U.S.S.R. — Continued
    Vyatskiy swell: Ivanov 197-162
    West Siberian Lowland: Rostovtsev 200-159
  Utah: Black 197-156; Case 197-205
  Yugoslavia: Damnjanović 194-171; Mužijević 193-157; Šumi 192-149
Geophysical well logging, carbonate reservoirs: Chombart 198-127
  coordination in operating company: Johnson 198-130
  production logging: Bryant 198-129
Geophysics, textbook: Parasnis 197-165
Georgia, age, tektites: Clarke 196-57
  radioactivity surveys: MacKallor 197-314; 200-312
Geotectonics, absolute age data, analysis by: Salop 201-3
  alkaline volcanic provinces on continents: Sheynmann 202-127
  basement relief, relationship to recent structures: Gorelov 203-181
  basic principles: Belousov 196-213, 197-176; Bemmelen 195-144; Watznauer 197-177
  block faulting, mechanism in China: Chang 201-189
  Canada, Canadian Rockies: Shaw 201-183
    Richardson Mountain trough: Jeletzky 201-186
  China, review: Tupitsyn 200-195
  continental accretion: Engel 199-143
  continental drift: Beekhuis 193-174; Durham 198-157; King 192-187; Wilson 197-179, 199-138, 201-174
    Antarctica: Hamilton 201-181
    Borneo: Fitch 202-122
    Cabot and Great Glen faults correlated: Holgate 197-182
    Europe and North America: Wilson 201-185
    glacial evidence: Cahen 201-190
    oceanic crustal deformation: Vening Meinesz 201-177
    paleography of Gondwanaland: Ahmad 195-147
    southwestern United States: Hunt 201-182
    Western Hemisphere: Moore 201-184
  continents and oceans, development: Dietz 202-120
  convection currents, continental drift: Girdler 201-175
  continental thickness: Weertman 196-212
  mantle: Runcorn 197-175

Geotectonics — Continued
  convection currents — Continued
    silica rising from mantle-core boundary: Stacey 197-174
  crustal evolution: Borisov 198-149; Potapov 193-175; Rode 199-147; Vasil'kovskiy 193-175
  crustal shearing, southwest Pacific: Fairbridge 198-153
  cycles, continental evolution: Sutton 201-173
    significance: Balukhovs'kyy 203-184
  cymatogeny: King 200-188
  deep ocean trenches: Vening Meinesz 200-192
  deformation, caused by distribution of masses: Caputo 192-189
    finite strain: Scheidegger 192-185
  denudation and orogeny rates: Schumm 203-174
  diapirism: Bemmelen 197-185
  diffusion mechanism: Perrin 199-137
  divergent trends, cause: Wise 198-148
  dynamic problems, expansion and contraction:Balabushevich 199-141; Kropotkin 196-218
  energy of intrusion: Gussow 201-176
  epeirogenesis: Hallam 199-142
    rhythms: Reyre 195-150
  expanding earth: Egyed 199-140
    Dirac's cosmogony: Jordan 195-141
  external dynamic forces:Lyustikh 198-150
  faulting, Japan: Weber 203-177
    physical theory: Gzovskiy 196-216
    San Andreas fault: Crowell 195-148, -149; Dibblee 197-183; Hall 197-184
  folding and faulting, mechanism: Nikolayev 196-219
  fold zones, junction between: Kulikov 203-182
  fracture analysis: Badgley 197-178
  glacial rebound, bedrock structures reflected in drift: Barton 194-185
    Canada: Lee 202-117
    phase changes: Broecker 193-177
  Hawaiian Islands, origin: Wilson 201-187
  isallo stress: Scheidegger 202-123
  island arcs, volcanism: Gorshkov 198-154, 202-121
    Western Hemisphere: Moore 201-184
    western Pacific: Krishnan 198-152
  island arc structure of Alps: Artem'yev 201-188

Geotectonics — Continued
  Japan, seismicity: Miyamura 196-112
  lineaments in lithosphere: Chebanenko 196-215
  magmatic processes, interrelation: Glangeaud 194-186
  mass distribution in crust, foredeeps: Scheffer 198-159
  mechanisms, volume changes in mantle: Subbotin 199-148
  modeling, optical method: Osokina 196-221; Sasinovych 199-149
    review: Gzovskiy 196-220
  North and South America: Childs 201-180
  ocean basins: Gilvarry 195-31
    meteorite impact origin: Gallant 196-223
  oceanization: Belousov 193-171
  ore-formation: Gill 203-175
  orogeny: Dietz 200-187
    U.S.S.R.: Azizbekov 202-124
  Ouachita-Appalachians system: King 192-187
  Pacific Ocean, tectonic characteristics: Ehara 197-181
  platforms: Odintsov 193-178
  pole-seeking and pole-fleeing forces: Hulley 201-172
  pseudo-viscous shear zones: Vening Meinesz 195-143
  recent deformation, airborne: Miroshnichenko 195-154
    basic characteristics: Nikolayev 195-178
    California: Whitten 194-187
    China: Lebedev 197-188
    Eurasia: Nikolayev 195-179
    geodetic measurements: Izotov 203-183
    Germany: Gronwald 192-191
    Greece: Mistardis 202-118
    horizontal component measured: Whitten 193-179
    Japan: Nagai 193-182; Okada 196-214
    Netherlands: Waalewijn 194-188
    Poland: Niewiarowski 194-190
    relation to gravity field: Rastvorova 195-176
    relation to volcanism: Florensov 202-133
    Scotland: Baden-Powell 203-178; Earp 200-194; King 203-179; Sissons 200-193
    small areas: Ozawa 201-179
    stream terraces as indicators: Ragozin 195-156
    Sweden: Lundqvist 198-156
    Unified European Leveling Network: Wernthaler 192-190, 194-189

Geotectonics — Continued
  recent deformation — Continued
    U.S.S.R.: Babak 195-155; Bondarchuk 195-161; Bylinskiy 197-186; Chemekov 195-173; Devyatkin 202-140; Doskach 195-167; Dumitrashko 195-174; Gudelis 194-191; Gzovskiy 194-195, 195-170;Indans 195-159; Kiryushina 195-165; Kovalevskiy 195-158; Kropotkin 195-177; Lesis 195-160; Lungergausen 195-166, -171; Meshcheryakov 194-193, 195-162; Nikolayev 195-151, -152, -153 -164, -169; Pronicheva 195-163; Rodzyanko 195-175; Sinyagina 194-194; Springis 195-157,-172; Svarichevskaya 195-168; Zhelin 194-192
    Wyoming: Love 193-180
  rift valleys: Egyed 198-158; Vroman 200-191
  scale of tectonic movement: Carey 193-176
  strain seismometer recordings: Hiersemann 194-91
  stress, elastic and friction: Hoeppener 201-178
    hydraulic fracture pressures: Morgenstern 196-222
    mountains and valleys: Scheidegger 203-180
  structures, form and origin: Azhgirey 196-217
  textbook: Goguel 201-170
  thermoelastic stresses: Lyubimova 193-234; Savarenskiy 194-224
  transcurrent faulting: Ridder 203-176
  United States, evolution of western part: Gilluly 202-115
    grabens on east margin: Engelen 199-144
  volcanic activity: Brouwer 202-314
    Azores: Mendonça 202-329
    deformation: Rivière 200-189
  volcanic rocks, origin: Gzovskiy 202-125
    structural position: Gabriyelyan 202-129; Goretskaya 202-134 Itsikson 202-138; Ivanova 202-135; Luchitskiy 202-136; Maleyev 202-132; Paffengol'ts 202-128; Shikhalibeyli 202-130 Skhirtladze 202-131; Svyatlovskiy 202-126; Ustiyev 202-137 Zhegalov 202-139
  Western Hemisphere: Moore 201-184
Geothermal energy, California: Facca 193-238; White 197-213
  Iceland: Bödvarsson 195-208
  Japan: Hayakawa 203-224; Nakamura 203-225
Geothermal energy — Continued
  Mexico: Blásquez 195-206
  world review: Penta 198-189
Geothermal gradient, Colorado, shallow boreholes: Lovering 203-213
  controlling factors: Druzhinin 200-228
  cooling effect of water bodies: Tsaturyants 196-250
  data analysis: Cheremenskiy 203-216
  Italy, Mont Blanc tunnel: Baggio 200-227; Olivero 199-185
    Salentine Peninsula: Mongelli 203-215
  Japan, Awara area: Nakamura 198-191
  Poland: Roman 195-209
  regional geologic problems: D'yakonov 199-190
  solar radiation effect: Frolov 196-246
  surface alteration: Lasky 200-225
  U.S.S.R., Azerbaijan oil fields: Yakubov 196-251
    Bukharo-Khiva: Kortsenshteyn 196-252
    Caucasus: Sukharev 197-215, 199-187
    Donets Basin: Duganov 193-237
    Kotselvaara: Cheremenskiy 202-165
    Kuban-Black Sea oil-gas area: Taranukha 193-236
    Minusin depression: Gavlina 199-189
    West Siberian artesian basin: Mavritskiy 199-188
    West Siberian Lowland: Koshlyak 200-229
Geothermometry, pyrrhotite and sphalerite: Arnold 196-253
  quartz and sphalerite: Takenouchi 195-211
  quartz veins, Rumania: Pomîrleanu 201-223
Germany, age, igneous and metamorphic rocks: Davis 197-20
  age, glass and tektites:Gentner 199-21
    granites: Faul 201-14
  crust, structure: Dohr 193-244
  density, rocks: Kopf 192-235, 203-209
  earth tides, observations: Eberhard 192-100; Groten 201-91
  electrical surveys, Erzgebirge: Christoph 199-99
    soil: Roeschmann 193-138
    storage reservoir: Adler 192-143
  geophysical exploration, methods: Stammberger 193-166
  geophysical surveys: Hertwig 192-150
  geotectonics, recent deformation: Gronwald 192-191

Germany — Continued
  gravity surveys: Oelsner 203-210
    granite plutons: Grosse 192-229
    Wittenberg fracture: Bein 192-228
  magnetic field, measurements: Kremser 192-267
  magnetic properties, basalt: Schult 198-261
    diabase sill: Rösler 195-281
    titanomagnetite in basalt: Petersen 192-292
  magnetic surveys: Christoph 199-99; Kutscher 192-304; Lehmann 192-306; Mauersberger 195-301; Meitzner 192-305; Merkler 195-299; Rast 195-300; Wagner 192-307
  meteorite craters, Ries Basin: Shoemaker 194-55
  radioactivity, rocks: Strunz 197-307
  radioactivity surveys, Bavaria: Berger 193-318
    Bundsandstein: Hermann 198-293
  seismic surveys: Dohr 193-244; Liebscher 192-339; Martin 198-335; Reich 199-340
  seismicity, Rhine graben: Laubscher 198-65
Ghana, earth currents, daily variations: Hutton 194-66
Glaciers, advance and retreat, theory of: Nye 201-191
  Alberta, Athabaska Glacier: Kanasewich 201-193; Paterson 202-142, 202-144; Savage 202-143
  Alps, Breithorn: Fisher 201-194
  Antarctica: Budd 198-161; Stuart 197-190
    Filchner Ice Shelf: Behrendt 192-194
    review: Mellor 194-198
    Roosevelt Island: Bentley 192-193
    Ross Ice Shelf: Crary 192-195; Swithinbank 203-186
    Taylor Glacier: Hamilton 192-192
  catastrophic advances: Weertman 195-181
  deformation at base: Lliboutry 203-185
  flow laws: Haefli 201-195
  Germany, Jungfraujoch: Haefli 201-195
  Greenland, altitude profiles: Brockamp 196-225
    review: Bader 194-197
  heat conduction, thinning ice: Jenssen 197-189
  ice caps, stability: Weertman 195-180
  Iceland, Vatnajökull: Rist 195-182
  movements, photogrammetric measurement: Blachut 202-145
  permafrost, ice wedge polygons: Lachenbruch 194-199
Glaciers — Continued
  regimen, variations: Shumskiy 200-196; Weertman 198-162
  research in 1962: Glaciological Notes: 198-160
  review: Dyson 194-196
  seasonal and climatic changes, response: Nye 201-192
  temperature, method of measuring: Philberth 196-224
  thermal regimen: Lliboutry 203-185
  total ice on Earth: Thiel 202-292
  U.S.S.R., Fedchenko Glacier: Akad. Nauk Uzbek. SSR 202-146
Granitization, mechanism: Perrin 199-137
Gravimeters, calibration, Russian GAE-3: Koz'yakova 198-182
  marine, aneroid: Haalck 201-203
    automatic: Bowin 193-211
    Graf-Askania: Morelli 192-217
    Graf-Askania and LaCoste-Romberg compared: Allan 194-213
    Graf-Askania Gss2 tested: Gantar 192-216
    gyro-stabilized: Graf 192-220
    Japanese: Tomoda 200-208
    LaCoste-Romberg tested: Dehlinger 192-215
    Russian: Kuzivanov 201-204
    second-order errors: Bower 195-196
    tests: Harrison 198-181
  moving base, principles: Balabushevich 193-215
  pressure effects: Trudu 203-202
  Russian GAK-ZM: Abel'skiy 199-170
  statistical comparison: Behrendt 194-214
  thermometers: Tulin 193-214
Gravity, absolute values, Leningrad: Yanovskiy 192-226
  absolute values, Sofia: Petkoff 203-208
  absorption: Harrison 198-88
  base networks, Africa: Masson Smith 195-195; Overseas Geological Surveys 192-222
    Antarctica-Japan-South Africa: Harada 202-159
    Europe: Kneissl 192-223
    European calibration system: Gantar 193-217, -218
    Italy-South Africa tie: Graham 193-220
    Poland: Bujnowski 198-184
    Rome-Barcelona tie: Morelli 192-225
    Rome-Lisbon tie: Martins 193-219
    Spain-Argentina tie: Baglietto 192-224
    world loop: Gantar 193-216
  computation, high elevations: Moritz 198-164

- Gravity — Continued
  - computation — Continued
    - over an ellipsoid: Monin 203-171
  - calotte correction, Cassinis' numbers as weight: Norinelli 193-193
  - computer programs: Shabanova 196-227
  - constant, decrease with time: Dicke 193-187; Peebles 192-197
    - secular variation: Dicke 193-188
  - current research (1962): Witten 198-166
  - curvature of the vertical, mountains: Kobold 192-202
  - deficiency, volcanism as cause: Vening Meinesz 200-358
  - deflection of the vertical, computation methods compared: Szabo 192-200
    - crust: Gassmann 193-190
    - determined by free-air anomalies: Arnold 192-199
    - isostatic anomalies: Arnold 192-201
  - Dirac's cosmogony: Jordan 195-141; Peebles 192-197
  - field at depth, residual method: Prakash 193-192
  - instrumentation, automatic network tying device: Gladkiy 197-203
    - calibration: Verbaandert 196-234
    - Eötvös balance: Norinelli 193-212
    - Eötvös-Schweydar torsion balance: Norinelli 193-213
    - torsion balances: Gran 197-202
    - U.S.S.R.: Kheyfets 196-235, -236
    - see also Gravimeters
  - pendulum measurements: Browne 192-213; Wolf 192-214
  - prediction and interpolation: Moritz 194-200
  - reduction, general considerations: Levallois 192-207
    - isostatic and earth-model methods contrasted: deGraaff-Hunter 192-205
  - static measurements, adjustment: Wielądek 199-162
  - textbook: Shokin 203-190
  - thermoelastic stresses, gravitating earth: Zharkov 203-191
  - tidal corrections: Bilski 201-200
    - 1963: Service Hydrographique de la Marine and Compagnie Générale de Géophysique 196-233
  - topographic correction: Pick 200-204
  - variation during solar eclipse: Zadro 192-203
  - variation with time, 4-month period: Balakrishna 196-228
  - vertical gradient, Mohole: Hammer 195-184
- Gravity — Continued
  - world-wide data, harmonic analysis: Uotila 198-165
- Gravity anomalies, analytical continuation: Nedyalkov 203-200; Strakhov 198-168, 199-157
  - attitude: Tyapkin 194-206
    - gravity potential derivatives: Gladkiy 197-197
  - bilogarithmic master curves: Naudy 195-189
  - Bouguer gravity corrections: Grant 195-186
  - center of gravity, calculation: Yun'kov 194-207
  - Chebyshev polynomials: Kuznetsov 193-206
  - circular lamina, expressions for attraction: Talwani 195-190
  - classification: Yun'kov 194-208
  - computer analysis: Kolmogorova 193-204
  - contact gravitating surface; computer construction: Luk'yanova 193-203
  - contacts: Tyapkin 199-150
  - crustal thickness: Galushko 193-200; Woollard 202-155
  - cylindrical masses: Nabighian 196-226; Prosen 193-194; Živadinovíc 193-196
  - Cyprus: Gass 202-158
  - data reduction: Bilski 197-207
  - deep structure, subtraction of upper strata: Hammer 201-197
  - density distribution in the basement: Bederke 197-200
  - density variations with depth: Vyskočil 198-179
  - depth to disturbing mass: Bulakh 198-177, 199-153, -155, -156, 200-202, 201-198; Salikov 195-193; Strakhov 199-154; Tyapkin 194-205
  - direct and indirect problems, graphical methods: Martynova 194-203
  - downward continuation: Carrozzo 197-191; Trudu 203-195
  - elevation effects, large areas: Taranov 196-231
  - Faye anomalies and isostasy: Andreyev 202-150; Artem'yev 202-149; Lyustikh 199-158
  - geologic structures modeled: Kozera 201-201
  - geotectonics, pole-seeking and pole-fleeing forces: Hulley 201-172
  - interpretation, theory of: Strakhov 201-288
  - island arc structure of Alps: Artem'yev 201-188
  - limiting mass distributions: Holizdra 197-199

Gravity anomalies — Continued
  local, interpretation: Grigor'yants 202-154
  normal free air: Hirvonen 192-206
  reduction, direct: Butakov 199-152
    Rudzki reduction simplified: Tengström 192-202
    single level: Stupak 199-160
  regional effects, master charts for eliminating: Bulakh 192-209
  second derivatives: Daneš 195-185; Martynova 193-209; Mende 193-195; Sagitov 200-199; Strakhov 200-197, -198
  separation from background: Karatayev 198-178; Moiseyenko 194-204
  smoothing, probability theory: Golizdra 203-197; Strakhov 203-198
  statistical analysis: Hirvonen 198-163
  successive approximation analysis: Kazinskiy 202-153
  three-dimensional convex bodies: Litvinenko 199-161
  three-dimensional finite mass: Paul 192-210
  three-dimensional reduced to plane: Tyapkin 193-210
  two-dimensional bodies, V_{zz} curves: Pavlovskiy 199-151
  variation with depth: Klushin 197-194
  vertical component, theoretical curves: Shvank 199-159
  vertical derivatives: Starostenko 200-201
  vertical step, inverse problem: Aleynikov 201-199
    tangents methods: Pavlov 202-152
  V_{xz}, formulas and graphs: Yun'kov 198-174
  V_{zzzz} and V_{zzxx}, calculation: Starostenko 203-201
  zero level, Newton's interpolation formulas: Kuznetsov 193-201
  see also Gravity exploration
Gravity exploration, airborne, gravimeters: Popov 194-202; Pushchina 202-156
  airborne, Eötvös effect: Popov 198-169
    precision: Nettleton 192-218
    Russian experiments 1960: Popov 203-199
    upward continuation: Nettleton 194-201; Roy 203-193
  base networks, triangular polygon method: Sobakar 193-198
  buried river bed: Norinelli 192-212
  cave detection: Colley 200-207
  conditions governing use of methods: Chereau 195-192

Gravity exploration — Continued
  correlation functions: Shaub 203-278
  deep and superficial components: Gol'dshmidt 197-193
  density determination, borehole measurement: Lukavchenko 196-230
    underground: Secor 203-203
  density of observation points: Sobakar 193-199, 198-170
  dome-shaped structures: Yun'kov 197-195
  forested areas, U.S.S.R.: Yegorov 199-167
  free air effect: Mel'kanovitskiy 196-232
  frequency analysis: Gladkiy 197-196
  gradients, electronic differentiator: Serbulenko 193-207
  gravity field related to tectonic movements: Rastvorova 195-176
  gravity maps, accuracy of: Vyskocil 200-203
  high-precision, oil and gas: Nemtsov 198-175, 200-206
  horizontal gravity gradient: Thyssen-Bornemisza 195-187
  instrumentation, string microbarometer: Lozenskaya 201-206
  magnetic deposits: Karpushin 200-287
  map preparation, computers used: LaPorte 195-191
  marine, accuracy: Caputo 200-211; Loncarevic 199-166
    Antarctic Ocean: Gayanov 199-183
    Greenland Sea: Chesnokova 199-169
    instruments and methods: Gayanov 199-168
    magnetic effects on pendulums: Kuzivanov 201-205
    reporting of data: Worzel 192-219
    review: Kanamori 201-202
    U.S.S.R.: Fedynskiy 199-182
  methods discussed: Fedynskiy 198-173; Nettleton 192-211
  mine workings: Yun'kov 198-176
  moving base, duration of observations: Popov 192-221
  oil, Japan: Hayashi 202-160
  potential fields: Constantinescu 199-165; Shalayev 200-200
  profile calculation, electronic computer: Morgan 200-285
  program planning: Aynard 194-212
  random functions: Kalashnikov 197-198
  reinterpretation of old data, deep oil prospects: Oilweek 193-191
  relief effect: Mironov 197-192; Sobakar' 199-163

Gravity exploration — Continued
- resolving power of mathematical methods: Serbulenko 193-202
- scale of survey: Arest 194-210; Kasatkin 194-209; Pavlovskiy 198-172; Petrov 194-211
- terrain corrections: Hagiwara 198-180; Koval' 200-205; Zommer 199-164
  - area to be taken into account: Dergachev 193-205
  - computers: Karlemo 203-194
  - nomogram: Dergachev 193-208
  - tables: Bible 195-188; Thyssen-Bornemisza 213-192
- textbook: Andreyev 202-151
- theory of: Jung 203-196
- tidal corrections: Mudretsova 202-77
- vertical gradient, Mohole: Hammer 195-184
- see also Gravity anomalies

Gravity field of the earth, calculated: Caputo 202-147
- crustal thickness: Sazhina 193-189
- harmonics of low order: Cook 201-196
- mantle, elastic models of: Kaula 203-189
- satellite measurements: Buchar 192-208; Cook 193-185; Kaula 193-184, 195-194; King-Hele 193-186; O'Keefe 193-183
- tesseral harmonics: Cook 203-188; Izsak 203-187
- topographic masses, effect of: Pellinen 196-229

Gravity surveys, Africa: Jones 200-213
- Antarctica: Bull 196-244; Cohen 195-204; Cook 200-223; Robinson 195-328; Tsukernik 203-325; Ushakov 196-245
- Atlantic Ocean: Talwani 192-233, 198-183
- Australia, Leigh Creek coalfield: Pegum 193-232
  - Queensland: Magellan Petroleum Corporation 192-234; The Papuan Apinaipi Petroleum Company Limited 194-217
  - South Australia: Pegum 193-233
- Baltic shield: Shustova 197-209
- Brazil: Henao-Londoño 193-227
- Bulgaria, Burgos basin: Demitrov 198-337
- Congo: Evrard 203-206
- Europe, Alpine zone: Artem'yev 194-215
- Finland: Honkasalo 197-208
- Germany: Oelsner 203-210
  - granite plutons: Grosse 192-229
  - Wittenberg fracture: Bein 192-228
- Gulf of Mexico: Yungul 193-226

Gravity surveys — Continued
- Iceland, Vatnajökull: Rist 195-182
- Idaho: Bonini 203-204; LaFehr 193-225; Mabey 193-224
- Indian Ocean: Talwani 192-233
- Ireland: Murphy 195-197; 201-208
- Italy: Boaga 196-240
- Japan: Mizoue 200-222
  - North Miyagi earthquake area: Jitsukawa 196-243
- Kentucky, map: Watkins 200-209
- Kenya: Makowiecki 203-205
- Mediterranean Sea, Eötvös corrections: Gantar 197-206
- Mexico, Baja California: Kovach 200-212
- Minnesota: Sloan 199-171
- Nevada: Allingham 195-297; Carlson 200-210; Healey 201-207
- New England: Joyner 202-157
- New Zealand: Reilly 195-203
- Northwest Territories, Devon Island: Hyndman: 199-174
- Poland: Kozera 201-211; Strzetelski 192-230
- Quebec: Tanner 199-173
- Rumania: Airinei 201-209; Botezatu 192-232, 199-175, 200-214, -215; Dumitru 200-116; Visarion 199-179, 201-210
  - Carpathian Bend: Airinei 192-231
  - Muntenia: Airinei 199-176, -177
  - Rîmnicul Sărat region: Botezatu 199-178
- Sardinia: Gantar 193-228; Trudu 193-229
- Saskatchewan, glacial drift: Hall 196-238
- Switzerland: Gonet 203-207
- Tchad Republic: Louis 196-239
- Texas: Jones 192-227, 199-172; Watkins 193-221
- U.S.S.R.: Antonenko 200-219
  - Amur-Zeya depression: Volodarskiy 198-187
  - Apsheron Peninsula: Tsimel'zon 196-241
  - Azov-Kuban basin: Chekunov 199-341
  - Baltic area: Faytel'son 201-213
  - Bakhara-Khiva: Vol'vovskiy 200-218
  - Central Russian depression: Nikitina 198-185
  - Crimea: Lebedev 203-211
  - diamond pipes: Romanov 199-180
  - Donets Basin: Malovitskiy 201-214
  - Far Eastern Region: Shaposhnikov 195-200
  - Kara Bogaz Gol: Laskina 200-217
  - Kazakh S.S.R.: Popov 197-211
  - Krivoy Rog: Panasenko 203-212
  - Kursk magnetic anomaly: Pavlovskiy 198-281

Gravity surveys — Continued
  U.S.S.R. — Continued
    mine workings: Mudretsova 193-197
    Moscow syneclise: Fokshanskiy 198-280
    Mount Elbrus anomaly: Avdulov 194-216
    Pechora coal basin: Poletayev 198-186
    permafrost areas: Bulmasov 200-221
    Sakhalin Island: Sychev 193-342
    Siberia: Volodarskiy 198-188
    Siberian platform: Fogler 195-201; Kuteynikov 197-212
    Tatar A. S. S. R.: Boronin 195-198; Krinari 195-199; Salikhov 193-231
    ties to Leningrad: Dobrokhotov 201-212
    Turgay depression: Bugaylo 196-242
    Urals: Malakhov 197-210
    Ust-Yenisei basin: Martynova 199-181
    West Siberian Lowland: Shablinskaya 200-220
  Utah: Behrendt 196-237; Gates 193-223; Mabey 197-204
  Utah and Colorado: Joesting 193-222
  Yugoslavia: Rodsandíc 193-230
Great Britain, geophysical surveys: Bullerwell 197-159
Greece, age, galena: Létolle 203-15
  age, wood: Galanopoulos 198-17
  crust, structure: Tanen 195-213
  geotectonics, recent deformation: Mistardis 202-118
  tsunami: Ambraseys 203-94; Galanopoulos 192-91
  volcanic activity, Santorin Volcano: Abbruzzese 202-340; Georgalas 202-331
Greenland, age, general listing Haller 193-12
  glaciers, altitude profiles: Brockamp 196-225
    review: Bader 194-197
  isotopes, oxygen in Skaergaard intrusion: Taylor 202-196
  meteorites, Thule: Buchwald 192-25
  paleomagnetism, Jurassic: Bowen 196-298
  seismic surveys, glacier thickness: Sjogren 192-338
Gulf of Mexico, gravity surveys: Yungul 193-226
  seismic surveys: Antoine 198-331; Moore 197-341
Gulf of Thailand, submarine geology: Emery 202-308

H

Hawaii, age, extrusive rocks: McDougall 198-10
Hawaii — Continued
  crust, thickness: Eaton 202-313
  earthquakes, 1959: Eaton 203-67
  magnetic surveys, Kilauea Iki: Decker 203-289
  origin of islands: Wilson 201-187
  paleomagnetism, correlation with Pacific islands: Tarling 195-287
  volcanic activity: Eaton 202-313; Macdonald 195-345; Ruhle 195-346
    1961: Moore 192-358
    Kilauea Iki: Macdonald 202-330
    physical properties of magma: Macdonald 203-337
    submarine pillow lavas: Moore 202-312
Heat, crust, thermoelastic stresses: Lyubimova 193-234
  gravity generated, ascending basalt: Harris 194-219
Heat flow, Antarctica, Scott Base: Robertson 198-133
  Atlantic Ocean, profile: Nason 195-205
  Australia, Broken Hill: Sass 201-219
  balance in earth: Bass 201-215
  California: White 197-213
  continental crust: Clark 201-217
  cylindrical probe theory, thermal constants: Crowe 200-231
  earth as a whole: Crowe 194-218
  fluxmeters, shape: Kaganov 196-248; Philip 196-247
  growth of earth: Runcorn 199-202
  Gulf of Aden: Von Herzen 200-226
  Gulf of California: Von Herzen 200-226
  Iceland, thermal areas: Bödvarsson 195-207
  infrared photography, covered structure: Fischer 201-220
  islands with permeable rocks: Mongelli 203-214
  Italy, Salentine Peninsula: Mongelli 203-215
  Japan: Horai 203-218
    Hokkaido: Horai 203-223
    Kanto and Chibu: Uyeda 203-219
    Kinki, Chugoku, and Shikoku: Uyeda 203-220
    Kyushu: Horai 203-222
    Tohoku: Horai 203-221
  Karroo series: Gough 199-184
  mantle, convection in: Runcorn 202-164
    distribution: Lyubimova 202-167
  measurement, disturbance in boreholes: Frolov 202-166
  Northwest Territories, Melville Island: Jacobsen 201-221
  oceanic areas: Horai 201-218; Von Herzen 201-216, 202-162
  Pacific Ocean: Von Herzen 202-161
  spatial variation, cause: Clark 192-237

Heat flow — Continued
  Tasmania: Jaeger 199-191
  thermal geochronology: Lafitte 194-177
  thermal history of earth: Runcorn 202-163
  thermal regimen, reestablishment in boreholes: Cheremenskiy 203-217
  thermistor thermometer: Ramanadham 198-190
  U.S.S.R., permafrost effect: Cheremenskiy 195-210
  volcanic steam at depth: Nekhoroshev 202-168
Hungary, age, biotite: Földvári-Vogl 192-8
  earth currents, surveys: Ádám 198-51
  geophysical surveys: Balkay 198-136
  magnetic field, measurements: Forrás 192-261
  seismic surveys, oil and gas: Tivadar 198-336
  seismicity, regionalization:Gzovskiy 193-70
    relation to structure: Bendefy 197-75

I

Iceland, geothermal energy: Bödvarsson 195-208
  glaciers, Vatnajökull: Rist 195-182
  gravity surveys, Vatnajökull: Rist 195-182
  paleomagnetism, Tertiary: Einarsson 194-280
  volcanic activity, Askja: Thorarinsson 193-361
Idaho, gravity surveys: Bonini 203-204; LaFehr 193-225; Mabey 193-224
  magnetic surveys: Mabey 193-224; Savage 196-305
Illinois, age, Wisconsin glaciation: Frye 200-11
Inclinometers, heat-resistant: Zholondz' 199-131
    measurements, boreholes in paramagnetic rocks: Pyata 200-180; Shitikhin 200-181
India, age, Deccan traps: Khambata 193-15
  age, igneous and metamorphic rocks: Venkatasubramanian 200-45
    orogenic cycles: Mahadevan 202-23
    Precambrian rocks: Pichamuthu 196-27; Sarkar 200-44
  earth tides, observations: Balakrishna 201-98
  elastic properties, basalts: Balakrishna 203-139
India — Continued
  electrical surveys, pyrrhotite: Paul 195-113
  geophysical surveys, 1958: Roy 199-121
    1959: Roy 198-141
    Nellore district: Rao 195-126
  magnetic field, observations: Indian Journal Meteorology and Geophysics 197-239
    variations: Murthy 192-272
  magnetic properties, manganese ore: Rao 196-288
  magnetic surveys: Aravamathu 202-250
    Deccan traps: Balakrishna 203-139
    Hyderabad: Balakrishna 195-304
  meteorite craters, Lonar Lake: Arogyaswamy 194-56
  paleomagnetism, Jurassic and Precambrian: Athavale 199-245
  radioactivity, copper deposits: Gangadharam 202-259
    granite: Sastry 194-294
Indian Ocean, age, iron-manganese nodules: Nikolayev 203-18
  crust, structure: Neprochnov 195-216
  gravity surveys: Talwani 192-233
  magnetic field, secular variations: Ivanov 200-258
  seismic surveys: Neprochnov 195-216
  submarine geology, fault scarp: Matthews 202-307
Indiana, magnetic surveys, buried dike: Andreasen 194-282
Indonesia, geophysical surveys: Deibert 203-161
  volcanic activity, danger classification: Hadikoesoemo 203-356
    temperature variations before eruptions: Neumann van Padang 203-355
Information theory, geophysical exploration: Tarkhov 195-129
Infrared analysis, rocks and minerals: Lyon 198-40
International Geophysical Year, review: Massey 200-169
  1963: Nature 195-131
Iowa, age, radiocarbon dates: Daniels 201-8
Iran, earthquakes, 1957: Peronaci 192-50
    1962: Ambraseys 203-68
Iraq, age, radiocarbon dates: Solecki 203-16
Ireland, electrical surveys, copper-lead: Hallof 194-138
  gravity surveys: Murphy 195-197, 201-208

Isostasy, compensation, time scales: McConnell 202-116; Takeuchi 199-139
  correction, elevation: Andreyev 202-150; Artem'yev 202-149
  present equilibrium in earth:Heiskanen 198-167
  statistical study: Neidell 202-148
Isotopes, aluminum, adularia: Hafner 199-204
  Ar-39/Cl-36, meteorites:Heymann 197-51
  barium, barite and sulfide veins: Gehlen 194-232
  beryllium-7, atmosphere:Polyakov 195-226
  boron, B-11/B-10 in minerals: Finley 194-227
  carbon, C-14 from cosmic-ray neutrons:Lingenfelter 199-205
    C-14 in meteorites:Goel 197-40
    coal balls: Weber 195-227
    gas condensate: Grinberg 197-224
    hydrothermally altered limestones: Lovering 201-236
    kimberlite: Petrov 194-228
    meromictic lakes:Deevey 200-243
    organic matter of detrital sediment: Sackett 201-232
    sulfur deposits: Vinogradov 195-228
  chlorine-36, Great Basin lake waters 192-247
  chromium, secondary minerals and meteorites: Svec 197-229
  curium-247, in nature:Cherdyntsev 198-212
  deuterium, Antarctica ice cap: Lorius 197-231
    atmosphere: Gonsior 196-270
    Great Basin lake waters: Bonner 192-247
    hydrous silicates:Godfrey 197-230
    Iceland waters: Friedman 202-192
    raindrops: Woodcock 202-191
    water evaporation: Craig 203-239
  gamma-ray spectrometry, effect of heavy metals: Durand 199-203
  germanium, meteorites: Shima 202-30
  helium, cosmic rays: Foster 197-232
    meteorites:Hintenberger 197-50
    planetesimals: Mitler 202-194
    thermosphere:Kockarts 195-230
  hydrogen, gas condensate:Grinberg 197-224
    mass spectrometer: Krishna-Murthy 196-269
    thermosphere:Kockarts 195-230
  lead, age determinations: Schütze 194-1

Isotopes — Continued
  lead — Continued
    age of tectonic activity: Kanasewich 197-14
    British Columbia: Leech 197-234
    carbonate rocks:Wampler 197-4
    Coeur d'Alene-type ores: Cannon 196-271
    determination in volcanic rocks: Masuda 203-238
    enrichment by uranium decay: Clayton 201-234
    galena: Cannon 198-211; Priem 195-11
    meteorites: Chow 196-33
    ores: Brown 197-233
    ore genesis: Cannon 199-206
    potassium feldspars:Doe 200-238
    reference sample: Delevaux 201-233
    review: Starik 199-207
    sediments: Chow 194-236
    Sweden: Wickman 201-235
    variations within same deposit: Zhirov 196-272
  light elements, geochemistry: Glangeaud 194-225
  lithium, terrestrial rocks and meteorites: Shima 200-239
  magnesium-24, enrichment in dolomite: Daughtry 192-248
  meteorites, Aroos: Honda 192-24
    cosmic-ray-produced in irons: Stauffer 193-30
    spallation reactions: Vinogradov 196-36
  neon, meteorites: Hintenberger 197-50; Merrihue 195-17
  osmium, meteorites: Gate 200-56
  oxygen, belemnoidea of Greenland: Bowen 196-298
    bromine pentafluoride extraction: Clayton 197-228
    calcite and dolomite: Friedman 200-240
    hydrothermally altered limestones: Lovering 201-236
    ice in Antarctica: Gonfiantini 201-237, 202-197
    iron formations: James 197-226
    metamorphic rocks: Taylor 202-195
    Skaergaard intrusion: Taylor 202-196
    water evaporation: Craig 203-239
    water in oil fields of U.S.S.R.: Gabril'yan 197-227
  potassium, K-39/K-41 in rocks: Harms 196-273
    meteorites: Kirsten 198-27; Voshage 193-31
    rocks: Létolle 194-229; -230

Isotopes — Continued
- radon, atmosphere: Jacobi 203-301
  - daughters: Schumann 203-303
- rare-earth elements, meteorites: Murthy 196-32
- rare gases, meteorites: Kirsten 198-27; Signer 197-37
- Rb-85/Rb-87 ratio: Shields 199-208
- ruthenium, meteorites: Bate 200-56
- stable, geochemistry: Letolle 194-226
- strontium, basalts: Faure 201-241
  - carbonatites, limestones, and strontianite: Hamilton 202-198
  - geologic index: Hedge 200-244
  - measurement technique: Yesikov 199-210
  - meteorites: Gast 193-33
  - modern mollusks on Precambrian terranes: Faure 199-209
  - spectral analysis: Zhiglinskiy 195-5
- sulfur, Black Sea: Vinogradov 196-274
  - igneous rocks: Shima 200-242
  - Italy: Ancarani-Rossiello 201-238, -239
  - meromictic lakes: Deevey 200-243
  - New Zealand sulfur standard: Hulston 200-241
  - petroleum: Yeremenko 199-211
  - pyrite in U.S.S.R.: Skripchenko 202-199
  - recent marine sediments: Kaplan 203-240
  - review: Anger 198-214
  - Sudbury, Ontario: Thode 192-249
  - sulfides in U.S.S.R.: Godlevskiy 198-213
  - sulfur deposits: Dessau 194-231; Vinogradov 195-228
  - sulfide-sulfate deposit: Buschendorf 201-240
  - volcanic origin: Noetzlin 194-233
- thermal waters, France: Fontes 197-225
- tin, mass differences: Barber 194-234
- tritium, atmosphere: Gonsior 196-270
  - hydrological cycle: Libby 203-237
  - meteorites: Tamers 197-49
  - natural waters: Romanov 199-281
  - Pacific Ocean: Bainbridge 202-193
  - rainwater in Germany: Israël 195-229
- uranium, bones and shells: Cherdyntsev 200-27
  - fractionation in sandstones: Rosholt 195-231
  - Italy: Ancarani-Rossiello 201-239
  - pitchblende and carnotite: Davis 194-235

Isotopes — Continued
- uranium — Continued
  - ratios in uranium minerals: Cherdyntsev 195-232
  - U-234, enrichment in water: Hill 199-212
- xenon, meteorites: Levskiy 193-32; Reynolds 201-25
  - monazite: Shukolyukov 202-201
  - terrestrial variations: Butler 202-200

Italy, age, granite: Eberhardt 198-16
- age, igneous rocks: Ferrara 201-12
  - pegmatites: Ferrara 201-13
- crust, structure: Di Filippo 193-245
- electrical exploration, ground water: Mosetti 194-139
- electrical surveys, buried eruptive masses: Norinelli 193-299
  - sulfur: Grancaviglia 192-135
- geophysical exploration, river channel: Norinelli 193-156
- geothermal gradient, Mont Blanc tunnel: Baggio 200-227
- gravity surveys, Rome: Boaga 196-240
- isotopes, sulfur: Ancarani-Rossiello 201-238, 201-239; Dessau 194-231
  - uranium: Ancarani-Rossiello 201-238
- magnetic field, measurements: Simeon 192-266
- magnetic properties, lava flows at Mount Etna: Bolfa 198-249
- magnetic surveys: Agocs 197-297
  - buried eruptive masses: Norinelli 193-299
  - Venice Lagoon: Viterbo 193-300
- radioactivity, rocks: Hieke Merlin 199-279
- radioactivity surveys, Ischia: Gasparini 192-319
- volcanic activity, Etna: Chaigneau 196-355
  - Stromboli: Cavallaro 202-341; Peterschmitt 193-362

J

Japan, age, general listing: Aldrich 197-17
- age, granite: Miller 198-20; Shibata 196-28, 198-19
- crust, structure: Aki 196-256, 203-104; Kaminuma 201-228; Matsuda 195-217
- earth currents, anisotropy: Rikitake 200-76
  - geomagnetic variations: Rikitake 200-77
  - observations: Hasegawa 202-52; Kondo 195-45

Japan — Continued
- earthquakes: Yasui 192-54
  - 1900 and 1962: Onda 196-109
  - 1923: Busch 198-60
  - 1951-60: Katsumata 192-100
  - 1961: Aki 195-54; Kagoshima Local Meteorological Observatory 193-65; Kishinouye 193-67; Kushiro Local Meteorological Observatory 193-66; Okada 195-53; Quarterly Journal of Seismology 192-53, 196-105; Sakai 192-51
  - 1962: Hagiwara 196-110; Okada 196-111; Sapporo 196-106; Sato 196-108; Sendai 196-107
  - aftershocks: Asada 203-83; Earthquake Research Institute 203-81; Hagiwara 203-82
  - hypocenter location: Miyamura 200-88
  - initial motion at epicenters: Seki 202-63
  - magnitude-frequency relationship: Tsuboi 203-74
  - mechanism: Ichikawa 202-61; Mikumo 196-120
  - swarms: Yasui 202-58
  - tsunami: Watanabe 202-65
- electrical surveys, granitic terrane: Baba 192-138
  - ground water: Yamaguchi 192-140
  - vein deposits: Otaki 192-139
  - zinc deposits: Odani 194-145
- geotectonics, crustal deformation: Okada 196-214
  - recent movements: Nagai 193-182
- geothermal energy: Hayakawa 203-224; Nakamura 203-225
- geothermal gradient, Awara area: Nakamura 198-191
- gravity and seismic exploration, oil: Hayashi 202-160
- gravity surveys: Jitsukawa 196-243; Mizoue 200-222
- heat flow: Horai 203-218
  - Hokkaido: Horai 203-223
  - Kanto and Chibu: Uyeda 203-219
  - Kinki, Chugoku, and Shikoku: Uyeda 203-220
  - Kyushu: Horai 203-222
  - Tohoku: Horai 203-221
- magnetic field, observations: Kakioka Magnetic Observatory 194-249, -250, 195-248, 203-269
- magnetic properties, secular variation: Yukutake 195-291
- magnetic surveys: Geological Survey of Japan 192-320
  - Oshima Island: Kato 195-305
  - zinc deposits: Odani 194-145
- meteorites, chondrites: Mason 192-22; Miyashiro 200-52, -53; Murayama 200-55

Japan — Continued
- microseisms, tripartite observations: Matuzawa 197-301
- radioactivity, rocks: Nishimura 200-307
  - volcanic gases: Iwasaki 202-260
- radioactivity surveys: Geological Survey of Japan 192-320
  - Akita Prefecture: Bojo 198-299
  - Ashio Mountains: Hayashi 198-295
  - Fukuoka Prefecture: Furukawa 198-301
  - Iwate Prefecture: Takahashi 198-300
  - Nagano Prefecture: Hayashi 198-296
  - Okayama Prefecture: Sato 198-297
  - uranium in manganese deposits: Hamachi 198-298
- seismicity: Miyamura 196-112
  - crustal structure: Tamaki 196-116
  - Hokkaido: Takaya 202-59
  - Nagaoka area: Niigata 192-52
- seismic surveys: Kanda 199-348
  - Ariake Sea: Kimura 192-340
  - Matsukawa geothermal area: Hayakawa 198-344
- seismic waves, Lg: Sima 193-93
- submarine geology, Enshu Sea: Sato 196-351
  - submarine canyons: Chujo 198-355; Sato 196-352
- thermal springs: Sato 199-358
  - Arima area: Okamoto 202-169
  - Gojōjiki area: Nakamura 193-363
  - Hokkaido: Saito 200-359
- tsunami, 1961: Takahasi 195-77
- volcanic activity, 1957-59: Minakami 202-318
  - Aso and Sakurazima: Kubotera 203-351
  - energy of: Sugimura 203-344
  - gases: Iwasaki 192-361
  - lava composition: Taneda 202-358, 202-359
  - magnetic variations: Rikitake 203-350; Yukutake 195-354
  - Nasusan Volcano: Tanaka 202-357
  - prediction: Kayama 203-346; Yasui 202-355
  - pyroclastic flows: Aramaki 203-348; Murai 203-349
  - Showa-Shinzan: Mizutani 203-353
  - Tokachi-dake: Katsui 202-356; Murai 203-352
  - types of eruptions: Tsuya 203-342
  - Yake-dake: Murai 199-357
  - zones: Derruau 196-356; Yagi 203-343; Ishikawa 195-355
- volcanic earthquakes, Mount Aso: Kikuchi 196-357

Japan Sea, crustal structure: Pshennikov 198-204

Jupiter, internal constitution: Öpik 197-67

K

Kansas, magnetic surveys, map: Keller 202-240
Kentucky, gravity surveys, map: Watkins 200-209
  meteorite craters: Englund 198-31
Kenya, age, granites: Saggerson 200-20
  geophysical surveys: Makowiecki 203-159
  gravity surveys: Makowiecki 203-205
Korea, electrical surveys, nickel deposits: Baag 200-300
  magnetic surveys: Chang 200-301; Geological Survey of Korea 192-308
    iron ore: Kim 200-299
    nickel deposits: Baag 200-300

L

Latitude, observations: Lavrent'yeva 203-127; Ogorodnik 203-126; Panchenko 203-121
  variation, aberration constant: Yatskiv 203-125
Latvia, geotectonics, recent deformation: Indans 195-159
Libya, age, radiocarbon dates: Vita-Finzi 202-14
Lithosphere, thickness, geodesy: Ledersteger 202-112
Louisiana, age, radiocarbon dates: Corbeille 199-8

M

Madagascar, age, shells: Battistini 199-11
  paleomagnetism, Cretaceous: Gough 201-282
Magma, ascent: Rittmann 202-333
  formation by stress release: Uffen 203-333
  origin: Shimazu 193-251
  physical chemistry: Sobolev 203-335
  upper mantle, pockets in: Shimozuru 203-232
Magnetic anomalies, analytical separation: Stupak 198-277
  calculated from properties of rocks: King 202-223
  Chebyshev polynomials: Kuznetsov 193-206
  computer analysis: Kolmogorova 193-204
  $\delta Z(P)/\delta h$ zero isolines: Pudovkin 201-296
  depth determinations: Kalinina 195-295; Orlov 201-289

Magnetic anomalies — Continued
  determination at different heights: Orlov 201-291
  downward continuation: Trudu 203-195
  integrals of: Helbig 201-286
  interpretation, second derivative methods: Danes 195-185
    similarity principle: Mikhov 198-273
    theory of: Strakhov 201-288
  inverse problem, analytical continuation: Strakhov 198-168; 199-157
    Fredholm equation: Savinsky 203-163
  linear magnetic dipole: Parasnis 195-293
  oblique magnetization: Orlov 201-292; Strakhov 201-287
  reduction to single level: Stupak 199-160
  S(o, h) functions: Pudovkin 201-294
  separation from background: Karatayev 198-178
  shape of disturbing body: Vogel 196-300
  smallest scale: Lugovenko 201-295
  spherical bodies, direction of magnetization: Orlov 201-290; Ponomarev 201-293
  statistical analysis: Chereau 199-249
  tabular bodies: Gay 199-246
  trends and spacing: Affleck 201-297
  variation with depth: Klushin 197-194
  vertical gradient: Karatayev 198-274
  zero level: Kuznetsov 193-201; Pudovkin 193-296
  See also magnetic exploration
Magnetic exploration, airborne, methods: Steenland 201-298
  airborne, precision: Giret 199-248
    radiogeodetic systems: Karasik 199-256
    U.S.S.R.: Glebovsky 192-298
  archeology: Black 194-284
  Arctic, magnetic variations: Aleksandrov 199-250
  base networks, errors: Vasil'yev 200-286
  bodies that are isotropic and soft magnetically: Zidarov 196-301
  correlation functions: Shaub 203-278
  crustal studies: Bulina 194-283
  density of observation points: Sobakar 193-199
  effective magnetization, calculation: Vogel 199-254

Magnetic exploration — Continued
  ellipsoids, homogeneous magnetized: Zidarov 196-303
  faults, tracing of: Andreyeva 195-317
  field variations, calculated at three stations: Kryukov 199-251
  frequency analysis: Gladkiy 197-196
  gradients, electronic differentiator: Serbulenko 193-207
  high accuracy apparatus: Karasik 199-253
  induced magnetic field: Solov'yev 198-275
  inductively magnetized bodies: Zidarov 196-302
  interpretation, Australia: Quilty 192-299
    data reduction: Forsyth 192-297
    frequency method: Solov'yev 193-295
    upper halfspace: Lapina 198-272
  iron deposits, reserves estimated: Polonskiy 201-299
  low altitude factors when combined with gamma surveys: Karasik 199-252
  low velocity layer, detection of: Rikitake 195-292
  magnetite deposits: Karpushin 200-287
  measurement at two altitudes: Larionov 193-315
  potential fields: Shalayev 200-200
  principles and methods: Nettleton 192-211
  profile calculation, electronic computer: Morgan 200-285
  remanent magnetism, effect on surveys: Hood 199-247
  resolving power of mathematical methods: Serbulenko 193-202
  seismomagnetic method: Savadskiy 198-276
  sun chart compass corrections: Fraser 196-304
  susceptibility surveys, U.S.S.R. Afanas'yev 197-272
  textbook: Logachev 202-230
  traversing methods: Mikhaylova 193-294
  ultrabasic rocks: Komarov 196-287; Tavrin 201-300
  vertical derivatives, calculation: Lapina 203-277
  vertical intensity, various depths: Orkisz 195-294
  volcanic regions, procedures: Bernshteyn 202-231
  See also magnetic anomalies
Magnetic field, Venus: Smith 198-41
Magnetic field of the earth, annual variations, U.S.S.R.: Adam 216-254, -255
  auroral activity: Ishizawa 196-283
    earth currents: Flock 203-63
    high-latitude disturbances: Khorosheva 201-258
Magnetic field of the earth — Contd
  auroral activity — Continued
    ion trapping mechanism: Piddington 202-214
  bay disturbances: Pudovkin 198-247
  boundary: Cahill 198-220
    proton data: Bader 194-242
  Cape Town anomaly, auroral emission: Gledhill 195-241
  conjugate points, high latitudes: Mather 203-256
  core of earth, turbulence in: Tverskoy 203-236
  core-mantle coupling: Rochester 193-266; Roden 199-214
  cosmic ray effects: Ahluwalia 193-274; Dorman 198-219
  current pattern, high latitudes: Fairfield 201-255
  currents in core: Chatterjee 193-265
  declination variation, Scandinavia: Gjellestad 192-270
  dipoles, evaluated from associated moments: Queille-Lefèvre 194-238
  distant field: Piddington 200-246
    fluctuations: Sonett 198-222, -223
    hydromagnetic waves: Sonett 198-221
    micro-structure: Sonett 198-224
  disturbances, asymmetric distribution of trapped particles: Fejer 192-280
    conjugate points: Boyd 196-275
    corpuscular streams: Dolginov 203-270; Hones 197-241
    cosmic-ray bursts: Dorman 203-259
    daily variation at magnetic equator Hutton 200-260
    directly related to solar eruption Lebeau 195-255
    geomagnetic time: Nikol'skiy 201-262
    high latitudes: Nikol'skiy 195-253
    IGY and Second Polar Year: Fukushima 200-263
    meteor effects: Jenkins 195-256
    morphology: Rishbeth 202-213
    Northern Hemisphere: Fel'dshteyn 201-261
    Northern and Southern Hemispheres compared: Mishin 198-238
    polar: Zhulin 198-239
    polar blackout: Warwick 197-243
    polar light in low latitudes: Bartels 194-254
    prediction: Macdonald 200-261
    types: Bobrov 195-268
  diurnal variations, 1949-57: Nicholson 193-269
    Antarctica: Maysuradze 201-259; Nikol'skiy 201-260
    lunar effect: Onwumechilli 199-227

Magnetic field of the earth — Contd
- drift, secular variation: Yukutake 193-264
- dynamo theory: Cole 198-215; Dougherty 199-216; Namikawa 197-236
- E and H perpendicularity variations: Barsukov 194-258
- earthquake effects on: Yoshimatsu 195-240
- eccentricity, triaxial: Barta 195-233, -234
- electron diffusion in F2-region: Kendall 193-262
- energy characteristics: Afanas'yeva 203-252
- equatorial, 26- or 27-month periodicity: Stacey 200-249
- equatorial electrojet, daily variation: Osborne 199-224
  - enhancement during polar storms: Akasofu 199-233
  - equatorial drift: Osborne 199-225
  - magnetic activity: Mayaud 203-257
  - Nigeria: Ogbuehi 199-223
- evolution of life: Uffen 199-215
- external and internal parts: Siebert 198-218
- f_oF2 relationships: King 193-275
- Gauss' treatise, German translation: Nodia 195-237
- general discussion: DeWitt 203-247; Nelson 201-244
- geomagnetic dynamo, laboratory model: Lowes 201-243
- geomagnetic hollow, solar streams: Kendall 199-230
- harmonic coefficients, epoch 1959.0: Zmuda 192-273
- H-component, variations near equator: Rastogi 203-255
- horizontal component, E ionization: Wilkie 197-244
  - linear deflections: Untiedt 194-255
  - nomograms: Lugovenko 201-250
- hydrodynamics: Mauersberger 195-236
  - distant field: Judge 194-240
  - propagation phenomena: Bazer 194-239
  - spatial derivatives: Ertel 195-239
  - substantial invariants: Ertel 195-238
  - upper atmosphere: Beiser 203-242
- instrumentation, absolute magnetic theodolites: Mansurova 195-244
  - data processing: Hultqvist 198-226
  - field compensation: Kouloumdjian 203-265
  - magnetic recording: Kolmakov 195-243; Vladimirov 199-218
  - magnetogram reader, semiautomatic: Caner 194-243
  - magnetograph base lines, smoothing: Wielądek 192-262

Magnetic field of the earth — Contd
- instrumentation — Continued
  - proton magnetometer: Nalivayko 203-263
  - quartz variometers: Bobrov 203-264
  - widening frequency range: Yegorov 199-219
- interface with solar wind: Beard 193-260, -261; Dessler 193-259
- interplanetary field: Spreiter 201-247
- ionosphere: Lopatina 200-265
- isomagnetic maps, New Guinea: Parkinson 198-230
- latitude variations: Sedova 199-51
- latitudinal passage: Wing 203-246
- lunar tides: Schneider 203-248
- magnetopause: Hines 201-245
- magnetosphere, boundary: Freeman 199-217
  - dynamics of: Lucke 192-256; Ward 196-276
  - general discussion: Jastrow 194-237
  - motion: Cole 200-248
  - outer part: Frank 201-246
- mapping, automatic: Cain 203-262
- micropulsations, auroral zone: Yanagihara 200-262
  - general discussion: Kato 192-274
  - impulsive and regular: Lokken 192-258
  - pearl oscillation: Gendrin 193-280; Heacock 195-257
  - spatial variations: Duffus 192-275
  - terminology: Jacobs 202-217; Matsushita 202-216
- Moon, geomagnetic disturbances: Bigg 197-242
- Moon and planets, influence of Bigg 202-207
- nomenclature: Chapman 197-235
- "normal", charts: Pochtarev 203-253
- observations, 1937-58: Bartels 194-246
  - Alaska: Coast and Geodetic Survey 203-266
  - Antarctica: Miyazaki 199-220; Nagata 200-256
  - Belgium: de Vuyst 192-263, 196-280, 203-268
  - Canada: Caner 195-246; Loomer 202-203; Ross 195-245,202-202
  - Fredericksburg, Virginia: U.S. Coast and Geodetic Survey 194-244
  - Germany: Kremser 192-267
  - Hungary: Forrás 192-261
  - India: Indian Journal Meteorology and Geophysics 197-239
  - Italy: Simeon 192-266

Magnetic field of the earth — Contd
  observations — Continued
    Japan: Kakioka Magnetic Observatory 194-249,-250,195-248, 203-269
    magnetometer towed by iron ship: Finger 198-228
    Mexico: Observatorio Magnetico de Teoloyucan 203-267
    outer space: Dolginov 203-270
    Philippines: Glover 199-228
    Poland: Przybyszewski 192-269
    Poland and U.S.S.R., values compared: Krzemiński 192-268
    Spain: Cardús 192-264,-265, 200-253; Wilkes 193-268
    Spitzbergen: Kowalczuk 192-271
    Tucson Magnetic Observatory: U.S. Coast and Geodetic Survey 200-252
    U.S.S.R.: Vinogradov 194-248
  origin, contraction mechanism: Aslanyan 198-216
    magnetic storms: Price 192-250
    phase of iron in core: Weiss 199-213
    precessional torques: Malkus 200-245
  periodicity: Ward 203-245; Williams 203-244
  Poland, base network: Karaczum 201-307
  polar cap aurora: Davis 202-209
  pulsations: Coulomb 192-276
    auroras: Al'perovich 200-266
    conjugate points: Nagata 202-210
    horizontal disturbing vector: Kurusu 195-254
    pc: Kawamura 195-252
    rapid: Gendrin 203-258
    Russian Arctic: Zubareva 194-258
    short period: Jacobs 193-272
  quiet arcs, lower latitude limit: Akasofu 197-240
  ring current, guiding-center approximation: Kozłowski 202-208
    magnetic moments: Akasofu 196-277
  rocket measurements: Hutchinson 200-251, 201-251
  rotation, effect of: Gorodenskiy 193-263
  satellite measurements: Bonetti 202-205; Dolginov 192-254, 193-267; Heppner 192-253, 194-241; International Geophysical Bulletin 203-249; Kalinin 192-252; Sonnet 192-255; Vestine 192-251
  scalar potential, represented by mathematical series: Fansleau 195-235
  second zone of disturbance, Arctic: Nikol'skiy 201-263
  secular variations, Antarctica: Mansurov 198-231; Nagata 195-249, 200-257

Magnetic field of the earth — Contd
  secular variations — Continued
    Atlantic and Indian Oceans: Ivanov 200-258
    causes: Barta 195-233; Kalinin 201-252
    convections in core: Nagata 194-252
    interior of the earth: Untiedt 192-259
    Scandinavia: Finch 195-250
    solar activity averaged out: Orlov 198-232
    stable dipole axis: Toulouse 194-251
    westward drift: Yukutake 193-264
    worldwide data: Burlatskaya 200-259
  storms. See magnetic storms
  sudden impulses, cause: Yamaguchi 194-260
  temperature of soil and air, systematic relationship: Egyed 203-243
  tides, equatorial regions: Rao 192-257
  torsional oscillations, correlated: Winch 201-242
  trapped particles: Apel 199-231
  triaxiality of the earth: Barta 198-217
  s.f.e. current systems: Rikitake 193-282
  solar corpuscular streams: Blum 200-247; Fehlhaber 201-257; Mogilevskiy 198-225, 203-250
  solar influences: Ellison 202-215; Liwshitz 202-206; Rao 193-277 Vestine 203-241; Dungey 202-212
  spherical analysis: Fougere 197-168; Pepushoy 203-251
  Sq current system, seasonal variation: Molina 193-279
  variations, 1932-1961: Bartels 201-256
    amplitude and period relationship: Yanagihara 194-259
    Antarctica: Nagata 202-211
    Arctic Archipelago of Canada: Whitham 196-281
    computer analysis: Osipov 198-227
    correlation with outer space activity: International Geophysical Bulletin 203-254
    earthquakes: Yoshimatsu 202-204
    equatorial enhancement: Nishida 193-270
    F-region: Singh 193-278
    high latitude regions: Lebeau 193-273, 196-282
    horizontal field: Kowalczuk 195-247, Onwumechilli 193-271
    India: Murthy 192-272
    interior of earth: Jankowski 197-246

- Magnetic field of the earth — Contd
  - variations — Continued
    - ionic concentrations in ionosphere: Shand 192-279
    - longitude effect: Knapp 199-222
    - low latitude regions: Rao 192-281
    - lunar in equatorial electrojet: Rastogi 199-226
    - lunar semidiurnal: Van Wijk 198-234
    - Peru: London 199-229
    - Poland: Kozłowski 192-277
    - quiet days: Nagata 200-264
    - quiet diurnal: Afanas'yeva 200-267
    - satellite and ground measurements compared: Antsilevich 198-236
    - satellite observations: Cain 194-253
    - short-period: Afanas'yeva 194-247; Mansurov 198-235; Vinogradov 193-283
    - solar and lunar: Rao 197-245
    - solar eclipse: Cullington 195-251
    - spatial distribution: Lawrie 199-221
    - U.S.S.R.: Dubrovskiy 194-256
    - very low frequency: Gendrin 193-281
    - worldwide annual: Mishin 198-237
  - volcanic activity, variations noted in Japan: Rikitake 203-350
  - whistlers: Barrington 192-278; Carpenter 201-248; Helliwell 202-218
  - World Magnetic Survey, satellite and rocket measurements: Kalinin 200-250
  - Year of the Quiet Sun: International Geophysical Bulletin No. 64 — 194-245; No. 69 — 198-233; No. 70 — 201-253; No. 71 — 201-254
- Magnetic logging, apparatus: Kal'varskaya 199-255; Meyer 194-285
- Magnetic properties, alkalic rocks, U.S.S.R.: Mikhaylova 196-286
  - alternating field method: Bagin 199-234
  - anomalies calculated: King 202-223
  - antiferromagnetic substances, fine grained: Cohen 197-257
  - archeomagnetism, variations during last 2,000 years: Burlatskaya 198-255
  - basalt, Australia: Mumme 192-295
    - Germany: Meitzner 192-305; Schult 198-261
    - U.S.S.R.: Faynberg 201-278; Metallova 197-267
  - basaltic subcrust: Bulmasov 193-250
  - changes with time, determinability: Frölich 197-255
  - core samples, orientation: Hsu 201-279
  - Cr_2O_3-Fe_2O_3 system: Cox 199-235
- Magnetic properties — Continued
  - cubanite: Sawada 200-278
  - demagnetization: Mumme 199-237 Vogel 195-275
  - dolerite: Powell 203-272
    - France: Bolfa 199-236
    - Germany: Rösler 195-281
    - U.S.S.R.: Faynberg 198-254
  - FeO-Fe_2O_3-TiO_2 system: Akimoto 197-262
  - ferric oxides and hydroxides: Creer 197-258
  - ferruginous sands, New Zealand: Ross 202-225
  - granites, U.S.S.R.: Mikhaylova 200-276
  - hematite, antiferromagnetic Curie point: Freier 193-289
    - temperature effects: Vlasov 201-274
  - igneous rocks, negative anomalies: Gusev 199-241
  - ilmenite, in hematite: Carmichael 197-263
    - in kimberlite, U.S.S.R.: Frantsesson 193-290
  - instrumentation, astatic magnetometer: Solov'yev 194-277
    - high temperatures: Wilson 195-278
    - induction ballistic device: Ivanov 201-275
    - spinner magnetometer: De Sa 200-280
    - stability measurement: Fröchlich 195-279
  - intensity, decrease with time: Komarov 202-224
  - iron deposits, Minnesota: Bath 194-279
    - Spain and Egypt: Vogelsand 192-293
  - laboratory methods: Bucha 200-283
  - lava flows, Mount Etna: Bolfa 198-249
  - magnetite, ore bodies: Andreyev 200-277
    - structural studies: Lapin 198-253
  - magnetization-blocking process: Kobayashi 197-260
  - manganese ore, India: Rao 196-288
  - measurement, dimensions of specimen: Roy 195-277
  - meteorites, anisotropic susceptibility: Weaving 194-42
    - Brewster: Weaving 197-47
  - moments, randomly oriented: Dickson 193-287
    - rare earth iron garnets: Perel 196-289
  - nomogram for calculating: Bystritskiy 197-265
  - paramagnetic substances, analyzer: Forrer 198-251
  - physical theory: Stacey 201-271

Magnetic properties — Continued
  polarity, field determination: Doell 193-291
  powder pattern study: Soffel 198-250
  quartzites, U.S.S.R.: Bezuglaya 198-252; Krutivskaya 193-293
  remanent magnetization, anisotropy: Fuller 194-274
    basalt on Mull: Ade-Hall 200-275
    low in igneous rocks: Pecherskiy 193-288
    stability: Sholpo 197-254
    tuffs: Markhinin 197-269
  reversed magnetism, ilmenite-hematite: Vlasov 201-273
    magnetite at low temperatures: Yama-ai 201-272
    physico-chemical effect: Smelov 197-253
    pyrrhotitic shale: Everitt 192-294
  rocks: Angenheister 192-288; Kobranova 203-164
    U.S.S.R.: Tavrin 201-276
  sandstone, Rhode Island: Agron 196-285
  secular variation, Japan: Yukutake 195-291
  sedimentary rocks, U.S.S.R.: Bosov 201-277; Martirosova 199-239
  serpentine, California: Dubois 194-275
  silt, depositional process: Griffiths 194-276
  sulfides and arsenides: Wintenberger 194-166
  superparamagnetism and superantiferromagnetism: Néel 197-256
  susceptibility, anisotropy of: Uyeda 194-273
    borehole measurements: Meyer 197-270
    clays: Norden 197-266
    metasediments: Stone 199-238
    phonolite: Stone 199-238
    regionalization in U.S.S.R.: Lishnevskiy 199-240
    rocks of Siberian platform: Turitsyn 195-282
    sedimentary and metamorphic rocks: Krinari 194-278
    stressed rocks: Stacey 192-289
    ultra fine grained particles: Takada 197-259
    volcanic rocks: Markhinin 197-268
  thermochemical remanent magnetization: Nagata 197-252
  thermomagnetization, concentration of ferromagnetic components: Brodskaya 195-276
  thermoremanence, multidomain grains: Everitt 192-290, 291
    pressure effects on: Girdler 203-271
    reversed: Ishikawa 197-264, 200-279
    separation from viscous: Bol'shakov 203-273

Magnetic properties — Continued
  thermoremanence — Continued
    single- and multi-domain grains: Stacey 195-274
    single crystals: Syono 200-274
  titanomagnetite: Basta 198-248
    basalt in Germany: Petersen 192-292
  ultramafic complexes, serpentinization: Komarov 196-287
Magnetic storms, 1958-59, Poland: Kalinowska 197-250
  1959: Panov 201-270
  1960, observations at Kiruna: Ortner 193-286
  1961: Tepley 201-269
  asymmetry in sun's hemispheres: Afonina 198-245; Bell 192-286, -287; Dizer 200-273
  aurora distribution: Akasofu 193-276, -285
  changes in F-region: Somayajulu 198-242
  contraction of auroral zone: Weill 198-243
  corpuscular streams, focusing effect: Böhme 195-260
    origin: Mustel' 195-266
    velocities in: Mustel' 195-267
  cosmic rays, minimum solar activity: Dorman 201-267
  cosmic ray storms, relationship: Axford 198-241; Trumpy 197-249
  drift theory: Piddington 201-264
  Dst and DS fields: Nagai 195-263; Sano 194-267
  DS variations: Sugiura 194-266
  exosphere, variations: Ondoh 193-284
  field distortion: Akasofu 202-219
  forecasting: Hakura 198-240
  form and magnitude, earth current effect: Ivanov 203-261
  frequency, annual variation: Mishin 203-260
  horizontal intensity, relation to Kp-indices: Banno 194-269
  hydromagnetic theory: Piddington 196-284; Wilson 200-270
  ionospheric disturbances, relationship between: Nagai 195-262
  Kp index: Dessler 202-222
  magnetodynamic theory: Zhulin 194-270
  main phase, decay rates: Akasofu 200-271
    development: Akasofu 194-261
    polar substorms: Akasofu 200-269
  maximum depression, daily inequality: Yoshimatsu 195-264
  mechanism: International Geophysical Bulletin 203-249
  oscillations, diminishing periods: Troitskaya 194-272
  outer radiation zone, expansion and contraction: Rosser 200-268

Magnetic storms — Continued
  - ozone increase in atmsophere: Kulkarni 201-265
  - pc-type pulsations: Oshima 195-261
  - pearl-type pulsations: Troitskaya 194-271
  - proton and electron energies, outer magnetic field: Pletnev 202-221
  - radial interplanetary magnetic fields: Dvoryashin 195-271
  - radiation intensity, coincident increase at balloon altitudes: Keppler 194-262
  - rapid fluctuations, spatial distribution: Lawrie 195-258
  - satellite observations: Bryant 194-264
  - solar activity, correlation with: Dizer 197-248; Kuleshova 201-268; Maeda 197-251; Mustel' 195-269, 195-270
  - solar protons: Pieper 194-263; Zmuda 197-247
  - solar radio bursts: Bell 200-272
  - sudden and gradual commencement: Afonina 195-273, 198-246
  - sudden commencements: Bartels 192-285; Sano 194-268
    - 12 earth radii: Hoffmann 194-265
    - cosmic noise absorption: Ortner 192-284
    - green oxygen ray: Christophe-Glaume 198-244
    - local time dependence: Shirgaokar 199-232
    - morphology: Ivanov 195-272; Sano 202-220
    - origin: Saemundsson 192-283
  - sun-earth transit time: Caroubalos 195-259
  - time lag, sunspot number: Mitropol'skaya 195-265
  - unified theory of high-latitude phenomena: Axford 192-282
  - velocity of particles: Minasyan 201-266

Magnetic surveys, Africa: Jones 200-213
  - Alaska: Grantz 193-298, 198-278
    - map: Andreasen 197-295; Henderson 197-294
  - Antarctica: Behrendt 197-299; Cook 200-223
    - Graham Land: Ashley 199-274
  - Arctic Ocean: Ostenso 203-299
  - Argentina, iron deposits: Gonzalez Laguinge 195-298
  - Arizona: Dempsey 202-244, -247, -248; Frischknecht 202-245, -246
  - Arkansas, map: Keller 197-287
  - Atlantic Ocean: Ivanov 195-306
    - Mid-Atlantic Ridge: Keen 198-279
  - Australia, Middleback Range: Mumme 201-309
  - British Columbia: Canada Geological Survey 203-296
  - California: Andreasen 202-249; Henderson 201-306

Magnetic surveys — Continued
  - Colorado: Joesting 193-222
  - Connecticut, maps: Popenoe 197-277, -278, -279, -280
  - Czechoslovakia: Homola 193-301
  - Delaware, map: Henderson 199-263
  - Florida, map: Dempsey 202-238
  - France, Jorat anomaly: Loriol 200-297
  - Germany, basalts: Meitzner 192-305; Rast 195-300
    - elevation correction for 1935: Mauersberger 195-301
    - Erzgebirge: Christoph 199-99
    - Halle basin: Wagner 192-307
    - iron deposits: Kutscher 192-304
    - lamprophyre dikes: Merkler 195-299
    - Saxony: Lehmann 192-306
  - Hawaii, Kilauea Iki: Decker 203-289
  - Idaho: Mabey 193-224; Savage 196-305
  - India: Aravamathu 202-250
    - Deccan traps: Balakrishna 203-139
    - Hyderabad: Balakrishna 195-304
    - pyrrhotite: Paul 195-113
  - Indian Ocean: Ivanov 195-306
  - Indiana, buried dike: Andreasen 194-282
  - Italy: Agocs 197-297
    - buried eruptive masses: Norinelli 193-299
    - Venice Lagoon: Viterbo 193-300
  - Japan: Geological Survey of Japan 192-320
    - Oshima Island: Kato 195-305
    - zinc deposits: Odani 194-145
  - Kansas: Keller 202-240
  - Korea: Chang 200-301; Geological Survey of Korea 192-308
    - iron ore: Kim 200-299
    - nickel deposits: Baag 200-300
  - magnetic field variations: Jewell 198-271
  - Maine, maps: Anderson 197-275, 200-289, 201-303, 202-232; Bromery 197-273, -274, -276, 199-258, -260, 200-288, 202-233; Griscom 202-234; Henderson 199-257, -259
  - Manitoba: Canada Geological Survey 203-294
  - Maryland, maps: Blanchett 199-264, -265, 200-290; Bromery 197-284; Henderson 199-263
  - Massachusetts: Andreasen 203-281; Meuschke 203-279, -282; Popenoe 203-280
  - Michigan, map: Balsley 203-287
  - Minnesota: Anderson 197-288, 200-291, -292, 201-304, 203-288; Keller 202-240
    - iron ores: Bath 194-279
  - Mohole drill hole EM7: Raff 196-306
  - Montana: Johnson 197-290, -291, 197-292, -293

Magnetic surveys — Continued
Nevada: Allingham 195-297; Brokaw 197-289; Carlson 200-210
New Hampshire: Andreasen 203-281
New Jersey: Andreasen 197-282, -283, 199-261, -262; Henderson 197-281, 203-286; Jesperson 202-235
New Mexico: Dempsey 200-293,-294, 201-305
New York: Andreasen 203-283,-285; Henderson 203-284,-286; Jespersen 202-235; Popenoe 197-277, -279
Northwest Territories: Canada Geological Survey 203-297
Nova Scotia: Canada Geological Survey 203-290
marine: Bower 197-296
oceanic areas: Horai 201-218
Oklahoma, map: Keller 202-240
Ontario: Canada Geological Survey 203-292, -293
Pacific Ocean: Matveyev 192-310
Pennsylvania: Henderson 199-263; Socolow 195-296
Poland: Tarass 194-288
lamprophyres: Karaczum 201-307
petroleum: Strzetelski 192-230
Portugal: Munuera 199-269
Quebec: Canada Geological Survey 203-291, -292; Pemberton 192-133
Rumania: Airinei 201-209
Carpathian Bend: Airinei 192-231
Muntenia: Airinei 199-176, -177
Saskatchewan: Canada Geological Survey 203-295
South Carolina: Burdick 202-237
South Dakota, map: Meuschke 202-242
Spain: Munuera 199-269
Surinam-Trinidad profile: Agocs 200-295
Texas: Andreasen 202-241; Brod 199-268; Watkins 193-221
Thailand, Bangkok-Singapore: Agocs 192-309
Union of South Africa, Bushveld complex: Coertze 200-296
U.S.S.R., Alakul' basin: Voytovich 197-298
Angara-Ilin region: Davydov 195-303
Baltic area: Faytel'son 201-213
composite map: Vasil'yeva 199-270
corundum: Pelyushenko 198-283
crustal thickness: Simonenko 193-302
Donets Basin: Malovitskiy 201-214
Far Eastern Region: Shaposhnikov 195-200
iron deposits: Rudnitskiy 195-302; Usenko 200-298
Kamchatka: Shteynberg 193-306
Karelia: Artemov 194-141
Kazakh S.S.R.: Auzin 194-289

Magnetic surveys — Continued
U.S.S.R. — Continued
kimberlite pipes: Savrasov 193-305
Kursk magnetic anomaly: Pavlovskiy 198-281
Leninogorsk district: Malygin 193-304
Moscow syneclise: Fokshanskiy 198-280
Siberia: Gusev 199-241
Siberian platform: Litinskiy 199-271
sulfides: Gorodnitskiy 199-272
Tatar A.S.S.R.: Krinari 194-278; Salikhov 193-231
Turgay depression: Bugaylo 196-242
Ukrainian S.S.R.: Gerasimov 198-282; Lebedev 193-303
Urals: Malakhov 197-210
Ust-Yenisei region: Lastochkina 199-273
Utah: Behrendt 196-237; Joesting 193-222; Mabey 197-204
Vermont, map: Andreasen 203-281; Meuschke 203-279; Popenoe 203-280
Virginia: Blanchett 199-265; Bromery 197-285, -286, 199-266; Johnson 202-236; Le Van 199-267
Wisconsin: Henderson 202-239
world, profile: Alldredge 201-302
Wyoming: Dempsey 202-243
Yukon Territory: Canada Geological Survey 203-298
Magnetometers, airborne, Australia: Newman 192-303
airborne, mounted in tail of aircraft: West 192-300
carborne, compensation of interferences: Tafeyev 194-286
field instruments, Germany: Fanselau 192-302
H-component, boreholes: Ponomarev 201-301
Italian Institute of Military Geography: Digiesi 192-301
marine, ship-towed: Finger 194-287
nuclear: Lomanyy 196-279
modulation: Hall 195-242
Russian model PM-1: Kudrevskiy 198-229
signal-to-noise: Faini 196-278
observatories interconnected, Poland and Czechoslovakia: Skorupa 197-238
Polish BMZ, zero level: Skorupa 197-237
rubidium vapor: Ruddock 192-260
Magnetotelluric exploration, conductivity of basement: Krotevich 198-49
dikes, effect of: Rankin 195-34; Weaver 201-61

Magnetotelluric exploration — Contd
  equivalence: Kolmakov 198-44
  instrumentation, induction pickups: Kolmakov 196-102
    sensitivity of pickups: Kolmakov 198-47
    total-field magnetometer: Green 196-101
  limitations of method: Srivastava 201-64
  method described: Berdichevskiy 195-38, 197-63
  horizontal component, recording: Kolmakov 198-43
  sounding curves: Kovtun 197-64
  U.S.S.R.: Vladimirov 198-46
  vertical fault: Obukhov 201-63
Magnetotelluric surveys, France: Fournier 199-49
  U.S.S.R.: Anishchenko 199-50
    Georgian, S.S.R.: Chernyavskiy 200-78
    Ust-Yenisei basin: Gvizd' 199-58
    West Siberian Lowland: Berdichevskiy 199-57
Maine, crust, structure: Steinhart 197-219
  magnetic survey: Anderson 197-275, 200-289, 201-303, 202-232; Blanchett 200-290; Bromery 197-273, -274, -276, 200-288, 199-258, 199-260, 202-233; Griscom 202-234; Henderson 199-257, 199-259
Manitoba, magnetic surveys: Canada Geological Survey 203-294
Mantle, aelotropic layers, double refraction: Balakina 193-254
  Arctic-Atlantic Ocean, seismic velocity: Tryggvason 193-253
  boundary with core: Stishov 195-224
  composition: Green 196-266
  conductivity: Launay 203-228
  convection: Runcorn 193-256, 202-164
    harmonics of land and sea-floor surface: Vening Meinesz 198-210
    pattern: Vening Meinesz 195-142
    rock creep: Stacey 197-222
  density, heterogeneity: Gurariy 193-255
  differentiation of: Vinogradov 196-254
  diopside and albite, effect of pressure on melting: Boyd 195-218
X discontinuities: Bugayevskiy 195-221, -222
  earth tide data: Tomaschek 193-102
  elastic models, gravity field requirements: Kaula 203-189
  elastic waves, traveltimes: Bullen 193-106; Kogan 193-122
  equations of state: Birch 202-190
Mantle — Continued
  equations of state — Continued
    gabbro and dunite: Zharkov 198-209
    stishovite: McQueen 199-198
  Europe, seismic velocity: Tryggvason 193-253
  ionic state: Cagniard 193-257
  low velocity layer, magnetic detection: Rikitake 195-292
    oceanic magma: Sheynmann 202-174
    temperature gradient: Shimozuru 202-189
  magma chambers: Shimozuru 203 232
    indicated by temperature distribution: Shimozuru 195-220
    Kurile-Kamchatka and Japanese Arcs: Fedotov 203-73
  mantle-crust mix, lateral inhomogeneity: Cook 199-200
  phase changes: Ringwood 202-187
    effect on earth's axis: Lamar 192-246
    olivine-spinel: Ringwood 194-223, 199-199
    pyroxene at high pressure: Ringwood 195-219
  phase equilibria coesite-stishovite: Stishov 203-229
  physical changes producing layering: Savarenskiy 194-224
  ScS waveforms: Otsuka 201-230
  seismic wave velocity, lower part: Caloi 199-201
    New Guinea Solomon Islands region Brooks 202-180
  soft layers: Harkrider 198-207
  source of water: Derpgoo'ts 196-267
  structure, Canada: Brune 196-257
    Love waves: Anderson 200-108
    Pacific Ocean: Ewing 202-179
    U.S.S.R., Kurile Islands: Fedotov 231
  thermoelastic stresses: Lyubimova 201-224
  upper, composition: Ringwood 192-245
    variations in: Goguel 203-226
  Upper Mantle Project, Canada: Oilweek 197-221; Uffen 193-252
    United States: International Geophysical Bulletin No. 66 — 194-222; No. 68 — 198-206
    U.S.S.R.: Rezanov 202-185; Zaleskiy 202-186
  U/Th ratios in eclogites: Lovering 198-208
  viscosity: Cook 200-236
  volcanic rocks, origin in: Matsumoto 203-233
Mars, free water: Lebedinskiy 196-98
  internal constitution: Lamar 197-61

Mars — Continued
  surface, lithology: Sharonov 196-97
  water vapor content of atmosphere: Adamcik 202-50
Marshall Islands, physical properties, rocks and sediments: Swartz 192-165
Maryland, magnetic surveys: Blanchett 199-264, -265, 200-290; Bromery 197-284; Henderson 199-263
  radioactivity, rocks: Moxham 198-284
Massachusetts, age, glacial deposits: Ogden 200-10
  magnetic surveys: Andreasen 203-281; Meuschke 203-279, -282; Popenoe 203-280
  seismic surveys, bedrock below river channel: Sammel 193-333
    Boston Harbor: Edgerton 199-338
Mauritius, sea level variations: McIntire 193-165
Mediterranean Sea, age, sedimentation rate: Delibrias 194-14
  earthquakes, mechanism: Di Filippo 192-89
  gravity surveys, Eötvös corrections Ganta 197-206
  submarine geology: Centre National de la Recherche Scientifique 193-352; Kovylin 193-353
  tsunamis: Ambraseys 193-88
Meteorite craters, Antarctica: Schmidt 196-59
  Bushveld complex: Bishopp 192-30
  Canada: Beals 194-52
  coesite and stishovite: Dachille 200-61
  Kentucky: Englund 198-31
  general discussion: Chao 202-44
  Germany, Ries Basin: Shoemaker 194-55
  identification: Cohen 202-45; Shoemaker 194-51
  India, Lonar Lake: Arogyaswamy 194-56
  origin, Meteor Crater, Arizona: Bjork 194-54
  Texas, Odessa crater: Evans 194-53
  Vredefort dome: Bischoff 192-30, 203-50; Poldevaart 203-51
Meteorites, ablation, modes of: Cook 202-33
  achondrites, petrochemistry: Moore 197-44
  age: Burkser 194-43; Hintenberger 197-50
    indicator of age of earth: Starik 196-6
    K-40/Ar-40: Marshall 194-44
    rhenium-osmium on irons: Herr 193-34
    Sikhote-Alin: Fisher 197-48
    stone: Kirsten 198-27
    strontium in stones: Gast 193-33

Meteorites — Continued
  age of elements, I/Xe in Richardton: Panasyuk 196-42
  Arizona: Breed 198-28
    Holbrook: Mason 192-21
  Arkansas, Miller chondrite: Mason 192-20
  Bondoc, unique features: Ninger 196-38
  Bruderheim, T and Ar-39 activity: Charalambus 194-45
  C-14 content: Goel 197-40
  California, Goose Lake: Butler 202-31
  Canyon Diablo, Ni in kamacite: Agrell 201-27
  carbonaceous chondrites, geothermometry of Mighei: DuFresne 192-23
    high temperature minerals: Ringwood 197-36
  chondrites, analysis: Easton 203-44
    earth model: Ringwood 197-46
    high-temperature plagioclase: Miyashiro 200-54
    Japan: Miyashiro 200-52, -53; Murayama 200-55
    light-dark structure: Wlotzka 201-26
    metamorphism: Wood 194-26
    origin: Frederiksson 203-41
  composition, benzene extracts of Orgueil: Meinschein 199-31
    carbonaceous chondrites: DuFresne 194-37
    cosmic-ray effect: Arnold 197-39
    iodine: Goles 194-35
    iridium in stones: Rushbrook 196-35
    octahedrite: Massalski 193-25
    Pt and Ir: Nichiporuk 194-33
    rare gases: Fisher 193-29; König 193-27
    tellurium: Goles 194-35
    uranium: Goles 194-35
    Zr and Hf: Ehmann 196-34; Merz 194-30
  Congo, Essebi: Corin 202-32
  cosmic radiation: Geiss 193-36
  cristobalite in the Carbo iron: Marvin 195-19
  Czechoslovakia, Příbram: Ceplecha 201-29
  density and mass distribution: Brown 193-45
  diamond, impact origin: Wentorf 193-26
  electron microanalysis: Goldstein 203-40
  Estonia, Igast: O'Keefe 192-26
  exposure age: Anders 196-43; Voshage 193-31
  fall frequency: Hawkins 199-37; Millard 202-27
  flight in atmosphere: Bronshten 203-49

Meteorites — Continued
  fracture-carved relief: Kashkay 198-29
  fragmentation, luminosity: Levin 201-34
  France, Sainte Marguerite:Jérémine 194-27
  Greenland, Thule: Buchwald 192-25
  heavy elements, Pantar: Reed 200-50
  helium diffusion,activation energy: Levskiy 202-29
  impact structures: Knox 199-26
  impactites,Tasmania: Taylor 193-51
  iron, cohenite as pressure indicator: Ringwood 194-39
    equilibria under high pressure: Ringwood 194-40
    nickel-iron phases: Lovering 194-41
    origin: Marshall 193-18
    phases present: Clark 192-15
    production rate of nuclides: Goel 197-38
    rare gases: Signer 197-37
    spallation reactions: Vinogradov 196-36
  isotopes, Ar-39/Cl-36: Heymann 197-51
    Aroos: Honda 192-24
    Canyon Diablo: Chow 196-33
    chromium: Svec 197-229
    cosmic-ray-produced in irons: Stauffer 193-30
    germanium: Shima 202-30
    helium and neon: Hintenberger 197-50
    lead: Starik 199-28
    lithium: Shima 200-239
    Ne-129 in Bruderheim: Merrihue 195-17
    potassium: Voshage 193-31
    rare-earth elements: Murthy 196-32
    rare gases and potassium: Kirsten 198-27
    Ru and Os: Bate 200-56
    strontium: Gast 193-33
    tritium in irons: Tamers 197-49
    variations: Gentner 201-24
    xenon: Levskiy 193-32
  Japan, Kyushu chondrite: Mason 192-22
  light-dark structures, Pantar and Kapoeta: Fredricksson 203-43
  lunar effect on rate: Bowen 198-30
  magnetic properties, anisotropy: Weaving 194-42
    Brewster: Weaving 197-47
  metallurgy of: Massalski 197-41
  micrometeorites, rocket measurements: Hemenway 193-37
  mineral composition:Mason 197-43
    new minerals (1961):Ramdohr 192-14

Meteorites — Continued
  New Zealand,Wairarapa Valley: Battey 192-27
  noble gases,Peysanoye:DuFresne 194-29
  Oklahoma, Walters: Roy 200-51
  orbits,radar study: Hawkins 196-39
  organic matter:Anders 195-20; Briggs 192-16,199-30;Calvin 193-46;Deflandre 196-45;Kaplan 203-45;Krejci-Graf 192-17; Mason 199-29; Mueller 195-21; Nagy 196-44; Staplin 196-46;Vdovykin 199-32
  origin: Mason 200-48
    lead isotopes as index: Starik 200-49
    single parent body: Lovering 197-45
  oxidative equilibria:Mueller 199-27
  radar studies: Eshelman 196-40
  rare earths, abundances: Schmitt 203-42
    compared with terrestrial rocks: Taylor 194-28
  rare gases, abundances and isotopes: Zähringer 192-19
    distribution in Pantar:König 192-18
    Kapoeta and Staroye Pesayanoye: Zähringer 194-34
    Tabor chondrite: König 193-28
  review, textbook: Mason 200-47
  stone, barium: Moore 202-28
    iridium by neutron activation analysis: Rushbrook 194-32
    Mn and Ti content: Moore 194-31
    opaque minerals: Ramdohr 198-26
  structure, shock waves: Maringer 197-42
  sputtering by Ar ions: Heymann 193-35
  temperature of formation:Massalski 193-25
  thermal history: Maringer 197-42
  thermal properties: Butler 196-37
  tungsten, cosmic abundance and nucleosynthesis:Amiruddin 194-36
  Tungus, geomagnetic effects:Ivanov 200-57
  U.S.S.R.,Dzhugdzhur: Yarmolyuk 195-22
    Tungus:Fesenkov 193-22, 201-30; Florenskiy 193-23;Ivanov 201-32;Plekhanov 201-31; P'yavchenko 193-24
  Washington County iron, thermal history: Cech 194-38
  Yugoslavia, general listing:Ramović 193-94
  zirconium-hafnium ratio: Ahrens 195-18
Mexico, exploration summaries,1961: Mina 192-144

Mexico — Continued
  geothermal energy:Blásquez 195-206
  gravity surveys, Baja, California: Kovach 200-212
  magnetic field,observations: Observatorio Magnetico de Teoloyucan 203-267
  volcanic activity, Colima group: Mooser 195-349
    Michoacan: Blasquez L. 195-347
    Tres Virgenes in Baja,California: Mooser 195-348
Michigan, magnetic surveys,map:Balsley 203-287
Microseisms, analog analysis: Sutton 200-104
  apparatus, polarization: Lin'kov 197-302,-303, 199-276
  cold fronts,generated by:Lacaze 200-303
  high frequency, U.S.S.R.: Antonenko 197-304
  Japan, tripartite observations: Matuzawa 197-301
  Norway: Nesse 192-311
  ocean waves, spectrums compared: Dinger 200-302;Haubrich 195-308
  origin: Hasselmann 202-251; Monakhov 202-253
  Pacific Ocean,observations:Monakhov 202-254
  periods,statistical study:Zátopek 200-304
  review: Darbyshire 202-252
  sea-bottom sediments: Bradner 197-300
  sediment-thickness determination, India: Saha 192-312
  storms of long and ultralong period: Oliver 195-307
  worldwide storm, 27-sec periods: Oliver 199-275
Mid-Atlantic Ridge, part of worldwide system: Heezen 198-358
Mine bumps, Czechoslovakia: Buben 192-354
Mine bursts, seismoacoustic effects: Konstantinova, 201-355
Minnesota, age, radiocarbon dates: Jelgersma 194-7
  gravity surveys: Sloan 199-171
  magnetic properties, iron ores: Bath 194-279
  magnetic surveys,iron ores: Bath 194-279
    maps: Anderson 197-288, 200-291, 200-292, 201-304, 203-288
Mississippi, age,granite:Denison 202-6
Missouri, age, igneous rocks: Tilton 194-6
  magnetic surveys: Keller 202-240
Model study, basic principles: Eygenson 196-205
Mohole project, drill hole in Puerto Rico, 1962: Offshore 194-175
Mohole project — Continued
  logging operations: McLelland 192-244
  review: Benson 200-234
Mohorovičić discontinuity, glacial rebound, phase changes: Broecker 193-177
  nature of: Wyllie 202-184
  Russian deep drilling program: Belyayevskiy 198-198
Montana,age,igneous rocks: Hunt 194-12
  earthquakes, 1959: Christopherson 193-64; Witkind 200-85
  magnetic surveys: Johnson 197-290, -291, -292, -293
Moon, albedo measurements, Lansberg region: Morris 200-70
  Apennine region: Hackman 200-63
  Apenninian series: Eggleton 200-66
  atlas: Firsoff 195-32
  atmosphere: Öpik 193-58
  back side, nature of: Bülow 197-60
    photographed: Bülow 192-41
  cartography and techniques of mapping: Maffei 196-67
  cloud-like objects,libration regions: Morris 200-71
  composition: Urey 193-52
  Copernican ray system,ballistics: Shoemaker 194-60
  craters, banded: Robinson 197-58
    cauldron subsidence: Firsoff 199-45
    classification: Moore 196-91
    correlation with terrestrial craters: Gilvarry 195-31
    depths: Fielder 196-85, 201-54; Warner 203-58, -59
    diameter-depth relations: Engel 196-88
    distortions by compressive stresses: Fielder 192-37
    distribution along lines:Shemyakin 200-72
    explosive yield calculated: Hess 194-59
    larger overlapping smaller:Fielder 201-55
    origin: Moore 196-82,-87;Tazieff 196-83
    profiles: Warner 196-84, -86
    Ptolemaeus: Palm 202-47
    radius-depth relation as function of age: Warner 193-57
    relative ages: Fielder 196-89
    statistical frequency: Salisbury 198-37
    stress systems around: Fielder 192-38
    theory of: Öpik 194-57
    volcanic origin: Devadas 196-96
  domes, catalog: Rae 202-48
    origin: Fielder 196-93
  dust,surface transport:Singer 197-57

Moon — Continued
  dust — Continued
    terrestrial ice nuclei: Vand 199-46
  electrostatic erosion: Coffman 198-39
  figure, convection currents: Runcorn 192-40
    photographic determination: Potter 196-65
  geophysical study: Orellana 192-39
  granitic surface, evidence for: O'Keefe 195-30
  gravitational heating: Kopal 201-52
  gravity field: Grushinskiy 196-64
  heat conductivity: Lettau 199-44
  infrared analysis: Lyon 198-40
  isotonal map: Hackman 200-69
  Letronne region: Marshall 200-64
  magnetic field: Gerharz 203-57
    cause of no superficial ferromagnetism: Dauvillier 195-27
    measurement by cosmic rocket: Dolginov 195-26
  maria, composed of dust: Warner 193-53
    gravity focusing of meteorite impact: Turski 193-54
    origin: Fielder 201-53; Nash 197-56
  meteorite accretion, effect on orbit: Lyttleton 193-59
  microdensitometer trace, analytical methods: Henderson 200-68
  microphotometer data, computer analysis: Davis 200-67
  motion, Hansen's lunar theory: Musen 198-36
  origin: Ruskol 198-35; Wise 198-34
    capture by earth: Alfvén 197-55
    earth tide phenomena: Ruskol 201-89
    orbital motion: Kopal 210-46
    satellite swarm: Ruskol 201-47
  Procellarian System: Marshall 200-65
  ray systems: Moore 196-95
    Aristarchus crater: McIntosh 196-90
    secondary craters: Fielder 193-61
  relief, marginal zone: Gorynya 193-62
  review: Baldwin 202-38; Deprit 195-29
  seismographs, hard landing: Lehner 194-88
  Straight Wall, fault plane: Fielder 202-46
  stresses, sources: Fielder 193-55
    surface: Warner 196-73
  surface, dielectric permeability and density: Troitskiy 194-61
    evolution: Benesh 196-70
    heat and electrical conductivity: Buettner 202-43
    neutron albedo: Rao 203-54

Moon — Continued
  surface — Continued
    photometric properties: Hapke 202-41, -42
    physical nature: Barabashev 196-66; Troitskiy 196-60
    radiative properties: Krotikov 196-62
    radio emission: Giraud 193-60; Salomonovich 196-61
    radio reflections: Bramley 197-59
    roughness, crater statistics: McGillem 194-62
    structure: Fielder 197-54; Krotikov 201-50
    summary: Sky and Telescope 203-60
    thermal properties: Baldwin 196-63; Krotikov 201-51; Muncey 201-49
    volcanic rock or dust: Mikhaylov 195-33
  surface features, description and origin: Dollfus 195-28
    origin: Fielder 196-71; Gilvarry 194-63; Miyamoto 198-38; Warner 196-69
    post-crater igneous: Warner 196-94
    sequence of formation: Warner 196-68
    slopes: Fielder 196-92
    stress fields: Firsoff 196-72
  tectonic activity, causal forces: Fielder 192-36, 203-56
  temperature: Medd 193-56
  thermal history: Runcorn 202-163
  tides: Harrison 202-40
    dissipation: Kaula 203-55
    theoretical: Sutton 202-39
  topography, height measurements: Clarke 196-75; Fielder 196-77; Kopal 196-74; Rackham 196-78; Turner 196-76, -79, -80, -81
  toroidal oscillations: Carr 192-35
  volcanic activity, Aristarchus: Kozyrev 201-56
    crater formation: Kozyrev 202-49
    escape of ejecta: Hédervári 201-57
Morocco, earthquakes, 1960: Choubert 198-58; Debrach 198-56; Dubourdieu 199-60; Erimesco 198-57; Rothé 195-48

N

Netherlands, age, galena: Priem 195-11
  geotectonics, recent deformation: Waalewijn 194-188
Nevada, earthquakes, 1954: Slemmons 200-86
  gravity surveys: Allingham 195-297; Carlson 200-210; Healey 201-207

Nevada — Continued
  magnetic surveys: Allingham 195-297; Brokaw 197-289; Carlson 200-210
New England, gravity surveys: Joyner 202-157
New Guinea, isomagnetic maps, epoch 1957.5: Parkinson 198-230
  volcanic activity, Manam: Taylor 203-337
New Hampshire, magnetic surveys, map: Andreasen 203-281
New Hebrides, volcanic activity, Matthew Island: Remy 203-338
  seismicity: Blot 203-339
New Jersey, age, metamorphic rocks: Long 192-4
  magnetic surveys: Andreasen 197-282, -283, 199-261, -262; Henderson 197-281, 203-286; Jespersen 202-235
New Mexico, age, lake deposits: Bent 200-12
  age, uranium deposits:
    volcanic rocks: Bassett 198-6
  crust, thickness: Norden 202-175; Stewart 195-97
  magnetic surveys, map: Dempsey 200-293, -294, 201-305
New York, age, general listing: Y.W.I. 201-7
  age, metamorphic rocks: Long 192-4, -5
  crust, structure: Dorman 194-220
  magnetic surveys: Andreasen 203-283, -285; Henderson 203-284, -286; Jespersen 202-235; Popenoe 197-277, -279
New Zealand, age, radiocarbon dates: Grant-Taylor 193-17
  crust, structure: Reilly 195-203
  earthquakes, mechanism: Adams 202-62
  geophysical surveys: Rudd 192-156
  gravity surveys: Reilly 195-203
  magnetic properties, ferruginous sands: Ross 202-225
  meteorites, Wairarapa Valley: Battey 192-27
  seismic surveys, thermal areas: Grindley 195-327
  volcanic activity, dormant zones: Healy 203-361
    Taupo zone: Healy 202-317
    Tongariro group: Gregg 195-356
Nigeria, age, fergusonite: Darnley 202-13
  magnetic field, equatorial electrojet: Ogbuehi 199-223
North Sea, seismic surveys: Closs 201-343
Northern Ireland, age, granite: Miller 200-22
Northwest Territories, age, radiocarbon dates: Müller 196-10
  gravity surveys, Devon Island: Hyndman 199-174
Northwest Territories — Continued
  heat flow, Melville Island: Jacobsen 201-221
  magnetic surveys: Canada Geological Survey 203-297
Norway, age, glacier advance: Liestol 203-11
  age, radiocarbon dates: Olsson 199-20
    uraninite: Bjørlyyke 202-16
  earthquakes, 1891-1950: Båth 194-70
  microseisms: Nesse 192-311
Nova Scotia, magnetic surveys: Boser 197-296; Canada Geological Survey 203-290
Nuclear explosions, Algeria, crustal structure: Mechler 195-103, 196-171
  depth or altitude, effect on signal: Rocard 194-118
  detection: Press 200-99
    body waves: Keylis-Borok 194-120
    surface waves: Brune 203-146
    type waves produced: Pasechnik 192-118
    whistlers: Helliwell 202-218
  earth tide measurement: Balakrishna 194-92, 197-107, -201
  elastic waves: Saha 193-121
    attenuation: Werth 198-99
    first arrivals: Beaufils 196-172
    generated: Smith 198-100
    long period: Pomeroy 196-167
    traveltimes: Jeffreys 196-168
  electromagnetic signal: Écollan 197-128
  epicenter location: Herrin 195-99
  GNOME: Carder 195-96; Hankins 195-102; Rawson 198-98; Smith 195-98; Stewart 195-97
    description: Carder 195-94
    ground effects: Carder 195-100
    monitoring stations: Westhusing 200-122
    particle motion in halite: Weart 195-95
    traveltimes and amplitudes: Romney 195-101
  induced faulting: Hoy 203-148
  magnitude, station correction: Pawechnik, 196-169
  M-discontinuity, curvature: Mechler 195-103
  normal mode oscillations of earth: Iyer 193-120
  P-traveltimes: Doyle 197-127
  P-waves, France, 1962: Rocard 196-170
  salt beds, elastic waves: Carder 194-121
  seismic effects, cratering experiments: Mickey 203-32
Nucleogenesis, origin of iron meteorites and heavy elements: Marshall 193-18

Nutation, aberration constant: Yatskiv 203-125
  diurnal oscillations: Pariyskiy 203-119
  earth rotation: Glagoleva 196-139
  earth tides, zenith stars: Drozdov 203-120
  latitude observations: Lavrent'yeva 203-127; Ogorodnik 203-126; Panchenko 203-121
  liquid-core effect: Popov 201-231

O

Oceans, origin: Panov 193-173
Ocean basins, geophysics of: Erimesco 196-347
  origin and history: Hess 197-180
Oklahoma, age, igneous rocks: Tilton 194-6
  geophysical surveys: McDaniel 198-135; Norden 193-153, -154
  magnetic surveys, map: Keller 202-240
  meteorite, Walters: Roy 200-51
Ontario, isotopes, sulfur at Sudbury: Thode 192-249
  magnetic surveys: Canada Geological Survey 203-292, -293
Oregon, age, volcanic rocks: Hay 196-7
  earthquakes, 1841-1958: Berg 196-104
  paleomagnetism, Miocene: Watkins 195-286
Orogeny, contraction theory: Lyttleton 196-211
  intrusive activity: Gilluly 202-115
  vertical movement as cause: Belousov 195-146

P

Pacific Ocean, age, iron-manganese nodules: Nikolayev 203-18
  Andesite line: Engel 202-309; Gaskell 195-343
  crust, Asia-Pacific transition zone: Aver'yanov 194-350
    thickness: Ewing 202-179; Santo 196-265
  heat flow: Von Herzen 202-161
  magnetic surveys: Matveyev 192-310
  mantle, seismic wave velocity, Solomon Islands region: Brooks 202-180
    structure: Ewing 202-179
  microseisms, observations: Monakhov 202-254
  seismicity, northwest margin: Petrushevskiy 202-56
  submarine geology: Fisher 198-353
  tectonic characteristics: Ehara 197-181
  volcanic activity, South Sandwich Islands area: Gass 203-358
Paleomagnetism, accuracy of methods, Hawaiian lava flows: Doell 198-257
  archeomagnetic studies: Burlatskaya 198-256, 201-249
  axes of rotation, evidence for: Creer 195-283
  basalt, Brazil: Creer 195-288
    Uruguay: Creer 195-288
  Carboniferous, U.S.S.R.: Vlasov 198-265
  conference in U.S.S.R., 1962: Vlasov 194-281
  continental drift and polar wandering: Northrop 200-281
  coral reefs, pole determinations: Ma 203-276
  correlation between Pacific islands: Tarling 195-287
  Cretaceous, California: Currie 198-258
    Canadian Arctic: Larochelle 201-281
    Madagascar: Gough 201-282
  current direction in sediments: Hamilton 195-280
  Devonian, England: Chamalaun 199-243
    U.S.S.R.: Lin'kova 201-283; Rusinov 198-264
  evaporite deposits, paleolatitudes: Irving 193-292
  expanding earth, plotting of poles: Hilgenberg 196-292, -293
  hydrothermal veins, Czechoslovakia: Krs 203-274
  Jurassic, Greenland: Bowen 196-298
    India: Athavale 199-245
    Tasmania: Stott 198-268
  latitude of oil formation: Irving 195-284
  magnetic properties, measurement of: Frölich 196-295
  Mesozoic, Australia: Irving 198-266, 198-270; Robertson 198-269
    Australia and Tasmania: Irving 198-267
    Falkland Islands: Blundell 201-285
  methods: Bucha 200-283
  Miocene, Oregon: Watkins 195-286
  paleoclimates: Nairn 200-284
  Paleozoic, U.S.S.R.: Popova 202-227
  Permian, Australia: Irving 201-284
    Belgium: Magnée 203-275
  Permo-Triassic, Spain: Schwarz 200-282
  Pliocene-Pleistocene, U.S.S.R.: Pospelova 202-229
  polarity epochs, North America: Cox 201-280
  pole migration, aperiodic shift: Jardetzky 192-296
    catalog: Irving 196-294
    continental drift: Deutsch 197-271
    path of: Creer 196-291; Irving 196-290

Paleomagnetism — Continued
  pole migration — Continued
    rate of: Kalashnikov 198-263
  Precambrian, Canada: Black 199-242; DuBois 198-259
    Great Dyke of Rhodesia: McElhinny 199-244; Nairn 198-260
    India: Athavale 199-245
    U.S.S.R.: Vlasov 202-228
  Quaternary, Spain: Glangeaud 196-299
  research in the U.S.S.R.: Tomkeieff 198-262
  reversal of field, cause: Wilson 196-297
    recognition: Blackett 197-261; Doell 193-291
    shale: Everitt 192-294
    Stormberg lavas: Zijl 196-296
    transition zones: Vlasov 202-226
  Tertiary, Iceland: Einarsson 194-280
  Triassic-Jurassic, Union of South Africa: Zijl 195-289
  U.S.S.R., general discussion: Yanovskiy 195-290
  volcanic rocks, Japan: Yukutake 195-291
Paleowinds, prevailing directions from ash deposits: Eaton 195-285
Pennsylvania, age, magnetite: Fanale 197-11; Green 197-12
  crust, structure: Dorman 194-220
  magnetic surveys: Henderson 199-263; Socolow 195-296
Permafrost, effect on geothermal gradient: Cheremenskiy 195-210
  electrical conductivity: Ananyan 194-168
  heat field: Lachenbruch 202-170
  ice-wedge polygons: Lachenbruch 194-199
Peru, crust, structure: Steinhart 197-219
  earthquakes, San Agustin fault system: Rodriguez 193-79
  magnetic field, variations: London 199-229
  volcanic activity: Bullard 202-337
Petrology, textbook: Barth 200-171
Phase changes, coesite-stishovite: Stishov 203-229
  germanate pyroxenes: Ringwood 202-188
  See also Mantle, phase changes
Philippines, magnetic field, observations: Glover 199-228
Physical properties, rocks, high pressure and temperature: Lebedev 199-132; Zhdanov 196-343
    methods of study: Zaleskiy 198-352
    Rumania: Stamatiu 200-350, -351
    Siberian platform: Beluzin 195-137
    variation with pressure: Crowe 200-346
Physical properties — Continued
  rocks and minerals, handbook: Dortman 198-143
  rocks and sediment, Marshall Islands area: Swartz 192-165
  sandstones, pressure effects: Dobrynin 195-136
Planets, origin: Die Umschau 192-13
  radio emission: Roberts 200-73
Plasticity, elasto-plasto-viscous materials: Mikhaylov 196-346
  ice: Jellinek 193-347
  physical theory: Idenbom 195-340
  thermodynamic theory: Kluitenberg 193-345
Poland, age, granites: Przewlocki 194-18
  age, radiocarbon dates: Dumanowski 192-9
  earth tides, observations: Dobrzycka 197-106
  electrical surveys: Tarass 194-140
  geophysical surveys: Bachan 201-151; Dąbrowski 194-172
    Carpathian Basin: Scheffer 196-194
    coal deposits: Skorupa 201-150
    salt deposits: Dąbrowski 201-149
  geotectonics, recent movement: Niewiarowski 194-190
  geothermal gradient: Roman 195-209
  gravity surveys: Kozera 201-211
    base networks: Bujnowski 197-198, -184
    petroleum: Strzetelski 192-230
  magnetic field, base network: Karaczun 201-307
    measurements: Przybyszewski 192-269
    variations: Kozłowski 192-277
  magnetic storms, 1958-59: Kalinowska 197-250
  magnetic surveys: Tarass 194-288
    lamprophyres: Karaczun 201-308
    petroleum: Strzetelski 192-230
  radioactivity surveys, oil and gas: Kopia 198-294
  seismicity, Upper Silesia: Gibowicz 197-76, 199-62
Porosity, effect of deformation: Gonor 199-353
  effect of rock pressure: Marmorshteyn 199-354
Portugal, age, uraninite: Bowie 197-19
  magnetic surveys: Munuera 199-269
Potential theory, inverse problem, unique solution: Tsirul'skiy 201-161
Prediction equations, simplified procedure: Mount 201-158
Pressures, ultra-high, geological processes: Jamieson 203-326
Probability paper, plotting rule: Gringorten 196-204

R

- Radioactivity, air, Alaska: Lockhart 193-313
  - air, Atlantic Ocean: Fontan 197-311; 201-310
    - circulation: Rama 202-261
    - diurnal behavior: Mattana 192-315
    - Europe: Isäel 201-311
    - Manitoba: Connor 203-305
    - measurement procedure: De Santis 203-307; Turf 203-306
    - radon: Bhandari 203-302; Fontan 196-310; Jacobi 203-301; Schumann 203-303
  - atmospheric dust, electrical precipitator: Yano 198-286
  - basalts: Heier 197-309
  - beryllium-7, branching ratio: Taylor 192-313
  - beta-ray spectrometer: Tendow 200-311
  - black sands, Egypt: Zaghloul 194-293
  - carbonate lava, Tanganyika: Poole 202-256
  - clays, U. S. S. R.: Serikov 202-257
  - copper deposits, India: Gangadharam 202-259
  - cosmic dust: Wasson 203-46
  - curie, definition: Jaeger 196-307
  - earth: Baranov 193-311
    - Vernadskiy's contribution: Saukov 199-277
  - granite, France: Roubault 193-308
    - India: Sastry 194-294
    - U. S. S. R. Amshinskiy 197-308
  - gravels and source rocks, France: Stussi 193-309
  - instrumentation: Duquesne 196-315
  - marine sediment, artificial: Osterberg 198-289
    - Black Sea: Agamirov 202-258
  - measurement of, method: Philippot 202-255
  - metallometric samples: Samutin 198-285
  - nuclear explosions, effect on rocks in boreholes: Bunker 194-292
  - radon, uranium mine workings: Kapitanov 193-312
  - rocks: Kobranova 203-164
    - France: Geslin 197-305; Hussein 197-306
    - gamma spectrometry: Jouve 194-290
    - Germany: Strunz 197-307
    - Italy: Hieke Merlin 199-279
    - Japan: Nishimura 200-307
    - Maryland: Moxham 198-284
    - small radioactive crystals: Coppens 193-310
    - U. S. S. R.: Ivanov 196-309

Radioactivity—Continued

  - satellite fragment, Sputnik 4: DeFelice 203-304
  - scintillation counters: Giffin 197-312
  - shale: Pliler 194-291
  - soil, radon and thoron in soil air: Israël 192-314
  - thorium and uranium, alpha activity: Cherry 197-310
    - ores: Horwood 193-307
  - uranium, soft energy spectrum: Khazanov 202-263
  - uranium deposits, France: Jurain 200-306; Roubault 196-308, 200-305
  - volcanic gases, Japan: Iwasaki 202-260
  - water, oilfields: Filonov 199-280
    - tritium: Romanov 199-281
- Radioactivity exploration, airborne, dual-scintillograph technique: Carter 192-317
  - airborne, effect of speed and the time constant: Giret 195-309
    - potassium, radium, and thorium: Boltneva 193-314
  - Australia, methods: Australian Bureau of Mineral Resources 192-316
  - economic effectiveness, U. S. S. R.: Mikheyev 199-302
  - emanation method, general discussion: Grammakov 194-295
    - local objectives: Grammakov 194-301
    - optimum filter: Khalfin 194-302
    - radon: Propretinskiy 194-298
  - geologic mapping: Berezin 198-288
  - hidden contacts: Polak 198-305
  - impermeable surface layer: Khaykovich 194-300
  - instrumentation, airborne detector: Pinasco 203-310
    - carborne: Grumbkov 199-282
    - Geiger-Müller counter: Akutsu 200-310
    - scintillators: Balyasnyy 201-314; Teyssier 200-309
  - marine, apparatus and procedure: Yermakov 199-284
  - mines: Triaca 193-315; Vetrov 194-299
  - oil: Liu 193-316
    - beta-surveys: Grumbkov 199-287
    - gamma method: Kopia 201-312; Laubenbakh 199-283
    - radon: Márton 196-311
    - surface properties of rocks: Shneyerson 199-288
  - oil shale: Braun 198-306

Radioactivity exploration—Continued
  ore deposits: Karmanov 201-313; Tolstoy 199-289
  radium, radon method: Simić 203-311
  radon, measurement: Márton 196-311
    soil air: Simič 194-132
  reverse problem, Fredholm equation: Savinskiy 203-163
  review: Filippov 203-308
  snow thickness measurement: Drigo 196-312
  spherical source, surface distribution of activity: Čermák 198-287
  stratigraphic correlation: Berezin 198-288
  uranium, dispersion aureoles: Balyasnyy 203-309
    four-component system: Vetrov 194-297
Radioactivity logging, activity within rock, directional measurement: Savinskiy 201-316
  applications, U. S. S. R.: Blankova 199-296
  beryllium deposits: Sen'ko 200-317
  beta-beta, ore deposits: Sokolov 199-298
  boron deposits: Fel'dman 197-321
  carbonate rocks: Petrosyan 198-115
  coal deposits: Gryzlov 200-146; Pleva 193-323
  computer program: Horn 201-165
  cycles in sedimentation: Safontsev 197-150
  density log: Pickell 198-308
  drilling operations: Zhuvagin 199-292
  gamma, anomalies: Ochkur 197-325
    coal deposits: Sebestyén 198-310
    correlation in Brazil: Fernandes 193-327
    densitometer: Filippov 192-318
    density: Czubek 197-316, Troitskiy 198-303
    monochromatic source in homogeneous medium: Voskoboynikov 201-317
    ore deposits: Artsybashev 202-264; Sokolov 199-298; Vol'fshteyn 192-323
    recording speed: Garkalenko 198-302
    Russian apparatus: Rogov 199-303
    scale factors: Lebedev 200-319
    spectrometer: Utkin 200-265
Radioactivity logging—Continued
  gamma—continued
    theory and interpretation: Cuzbek 192-322
    thickness determination: Cuzbek 192-321
  gamma effect of drilling mud: Cuzbek 193-321
  ground water: Patten 202-100
  induced activity, aluminum: Yakubson 199-301
    nomograms: Blankov 199-295
    operating wells: Blankov 199-294
    rate of movement of water: Blankova 199-297
    sedimentary rocks: Belen'kiy 199-300; 201-324
  instrumentation, gamma spectrometer: Deyev 201-325
    miniaturized: Benjamin 194-159
    nonlinearity of: Ivankin 199-306
    portable neutron: Lopovok 193-326
    time constants: Guberman 197-322
    truck-mounted: Sokhranov 199-107
    uranium ores: Kolesov 202-262
    U. S. S. R.: Gulin 199-290; Kukharenko 199-291; Mukhin 198-309
  iron ores, U. S. S. R: Garkalenko 199-111
  isotope tracers, resins as carrier: Zhuvagin 199-305
  manganese ores: Fel'dman 197-320
  mercury deposits, U. S. S. R.: Ivanov 200-318
  neutron, absorbing mediums: Filippov 193-322
    activation: Leypunskaya 193-325
    Azerbaijan S. S. R.: Bespalov 199-293
    bauxite: Belykh 201-321
    boron determination: Belomar 192-327
    boundary-separated mediums: Sen'ko-Bulatnyy 201-318
    coal deposits: Belomar 203-312
    field tests: Hoyer 193-319
    iron ores: Blyumentsev 201-322
    low-hydrogen rocks: Kozachok 192-326
    moderation length: Kozhevnikov 197-313
    neutron generation in wall rock: Filippov 192-325
    ore deposits: Bulashevich 192-324
    Po-B source: Kaipov 199-299

Radioactivity logging—Continued
  neutron—continued
    space-energy distribution: Barsukov 200-314; Kozhevnikov 197-319, -324; Yakubson 197-323
    time distribution: Zakharchenko 196-321
    water-oil contact: Dvorkin 200-316
  neutron migration: Zakharchenko 201-319
  ore deposits: Czubek 197-317; Khaykovich 194-296; Kozyrin 200-142; Voskoboynikov 201-320
  permeability, tracer injection: Korzhev 200-315
  porosity: Larionov 197-318; Ono 198-304
  potassium minerals: Pshevlotskiy 193-324; Utegenov 201-323
  potential of method: Mardock 198-307
  reference book: Dakhov 194-153; Pirson 198-112
  review: Filippov 203-308; Stick 193-320
  salt deposits: Perkov 192-142
  surveys, England: Cosgrove 196-322
    U. S. S. R.: Belousova 202-101; Dem'yanovskaya 195-313; Ostryy 198-311; Us 199-110
  uranium content, computer analysis Scott 201-315
Radioactivity surveys, Argentina, uranium: Jemma 195-311; López 195-312
  California: Books 196-317; Sikka 198-290
  France: Coppens 193-317; Giret 196-318; Rothé 196-319, -320
  Georgia: MacKallor 197-314, 200-312
  Germany, Bavaria: Berger 193-318
    Bundsandstein: Herrmann 198-293
  Italy, Ischia: Gasparini 192-319
  Japan: Geological Survey of Japan 192-320
    Akita Prefecture: Bojo 198-299
    Ashio Mountains: Hayashi 198-295
    Fukuoka Prefecture: Furukawa 198-301
    Iwate Prefecture: Takahashi 198-300
    Nagano Prefecture: Hayashi 198-296
    Okayama Prefecture: Sato 198-297
    uranium in manganese deposits: Hamachi 198-298
Radioactivity surveys—Continued
  Poland, oil and gas: Kopia 198-294
  Quebec, faults: Sikka 198-291
  Switzerland: Rybach 198-292, 199-278
  Tennessee, Oak Ridge area: Bates 195-310
  Texas, map: Gillou 196-316; MacKallor 197-315
  U. S. S. R., Azerbaijan, S. S. R.: Alekseyev 199-286
    Bukhara-Khiva: Semenov 199-285
    ore deposits: Polyakov 200-308
Rhode Island, magnetic properties, sandstone: Argon 196-285
Rhodesia, paleomagnetism, Great Dyke: Nairn 198-260
Rock mechanics, applications: Makiyama 199-356
  photoelastic measurement: Roberts 200-347
  review: Mayer 202-293
Rumania, earthquakes, mechanism: Constantinescu 193-82
  geothermometry, quartz veins: Pomîrleanu 201-223
  gravity surveys: Airinei 192-231, 199-176, -177, 201-209; Botezatu 192-232, 199-175, 199-178, 200-214, -215; Dumitru 200-216; Visarion 199-179, 201-210
  magnetic surveys: Airinei 192-231, 199-176, -177, 201-209
  seismic surveys: Constantinescu 201-345; Paicu 201-344, -346; Vasiliu 201-347
  seismicity, Vrancea area: Sagalova 193-71
Rwanda, age, pegmatites: Monteyne-Poulaert 199-12

S

St. Vincent, volcanic activity: Wager 202-320
Sahara Desert, age, lignite in terrace deposit: Beucher 203-14
Samoa, paleomagnetism, correlation with Pacific islands: Tarling 195-287
Sardinia, gravity surveys: Gantar 193-228; Trudu 193-229
Saskatchewan, gravity surveys, glacial drift: Hall 196-238
  magnetic surveys: Canada Geological Survey 203-295
Scintillators, airborne, Australia: Newman 192-303
  detectors compared: Proctor 196-313

Scintillators—Continued
  liquid, beta rays: Duquesne 196-315
  marine, underwater measurement: Proctor 196-314
  See also Radioactivity exploration, instrumentation
Scotland, age, eclogite: Miller 200-23
  age, igneous rocks: Miller 203-10
    pegmatites: Bowie 197-19
  basalt, remanent magnetization: Ade-Hall 200-275
  geotectonics, recent movements: Baden-Powell 203-178; Earp 200-194; King 203-179; Sissons 200-193
Sea level, fluctuations, 45-year cycle: Mosetti 203-162
  fluctuations, Mauritius: McIntire 193-165
Sea of Okhotsk, crustal structure: Pshennikov 198-204
Seismic exploration, accumulation-of-signals method: Voyutskiy 194-320
  acoustic sounding, underground: Mikhaylovskiy 203-318
  aerial shooting, Germany: Shirokov 198-334
  amplitudes, weight of charge: Gurvich 199-315
  borehole surveys, displacement directions: Gal'perin 201-330
    three-dimensional interpretation: Konovalov 201-332
  Broomstick Distributed Charge: Martner 196-335
  Capacitance pickups: Vetchinkin 198-329
  charges, efficiency: Roth 203-144
  deep-hole detection, cased and uncased: Van Sandt 200-334
  deep seismic sounding, crustal studies: Belousov 194-312
    general discussion: Fedynskiy 194-311; Riznichenko 194-310; Veytsman 194-313
  depth or altitude of explosion: Rocard 194-118
  elastic vibrations, generation: Kaplan 198-322
  electrical logging, shot holes: Kamata 201-147
  electrical surveying, shot-hole planning: Hermes 200-332
  electroseismic effect: Antsyferov 195-314; Chauveau 203-321; Mazanova 196-184
  engineering geology: Nazarnyy 196-337

Seismic exploration—Continued
  equipment, pontoon-mounted drill: Yakovlev 199-337
    Russian drill: Vishnyakov 199-332
  fan filters, theory of: Fail 202-271
  faults, tracing of: Andreyeva 195-317
  filtering, compensating: Chauveau 200-325
  frequency analysis: Averko 193-331; Kats 200-321
  frequency spectrum, dependence on weight charge: Mikhota 194-318
  gas explosion method: Yevdokimov 197-327
  geophones, ground coupling: Fail 195-320
    grouping: Chichinin 198-321; Grudeva 193-330; Holzman 198-319; Meshbey 194-322; Urupov 200-326
    natural frequency and sensitivity: Šamšula 194-327
    remote control of polarity: Šamšula 194-326
  geosonic phase blaster: Briggs 195-322
  ground water: Breusse 203-150
  hidden layer problem: Hawkins 196-323
  impulse shape: Yepinat'yeva 203-319
  instrumentation, amplifier: Friedmann 195-323; Galkin 199-331; Slutskovskiy, 201-342
    borehole geophone: Demidenko 199-336; Lynn 200-335
    deep seismic sounding: Galkin 194-329
    geophone grouping attachment: Grodzenskiy 199-334
    interval timers: Hawkins 194-325
    low-frequency: Bulin 194-119; Mozzhenko 194-330
    magnetic recording: Fedorenko 200-336, -337; Kabo 199-335
    measurement of large amplitude variation: Rosenbach 202-273
      pendulum motion: Adachi 192-335
    radio seismic station: Ivanov 194-331
    recording channel: Polshkov 201-341
    Russian γ8-channel RNP: Putimtsev 198-330

Seismic exploration—Continued
  instrumentation—continued
    seismolocator: Rappoport 197-336
    sensitivity control: Rosenbach 202-272
    transient phenomena in seismographs: Polshkov 194-333
    U. S. S. R.: Lev 199-333
    wave spectral analysis: Khudzinskiy 194-328
  interpretation, nomograms: Nikitin 199-323
  low-frequency: Vasil'yev 194-319
  low-velocity surface layers: Rudnitskiy 198-323
  marine, forewarning device: Friedmann 201-340
    frequency characteristics: Zverev 198-324
    matched filter detector: Clay 194-304
    radio buoys: Lunarskiy 194-332
    refraction arrivals: Meecham 201-327
    sonic pulse shape: Caulfield 198-328
    wave guides: Kuroda 199-330
  methods, Poland: Banaś 201-339
    U. S. S. R.: Polshkov 198-325
  mining geology, steep intrusive contacts: Oblogina 192-332
  model studies: Kasahara 201-337; Takaga 201-338
  mud echo-sounder: Somers 196-338
  multiple shocks, borehole explosions: Yepinat'yeva 201-331
  oil, Japan: Hayashi 202-160
  plane-front method: Nomokonov 198-320; Vasil'yev 201-328
  primary waves, nature of: Pomerantseva 194-314
  probability studies, three variants: McLemore 200-320
  reflected and refracted waves, dynamic relations: Yepinat'yeva 194-315
  reflection, amplitude of multiple reflections: Ivanov 202-268
    average-time method: Krylov 199-316
    Cagniard's method: Dix 197-109
    computer applications: Dennison 199-307
    construction of boundaries: Malushin 199-313
    converted waves: Ratnikova 199-309, 201-329
    depth calculations: Oliveira 203-313
    expanding reflection spread: Musgrave 196-325

Seismic exploration—Continued
  reflection—continued
    extraneous energy: Jeffers 195-316
    gentle platform structures: Glotov 199-312
    horizontal data stacking: Mayne 196-326
    horizontal velocity variation: Urupov 200-329
    intensity control: Ivanov 199-326
    marine: Vartanov 199-310
    marine electrosonic profiler: 197-326
    mine in salt plug: Wachsmuth 196-334
    ray diagrams for traveltime curves: Beránek 194-309
    shot popping method: England 196-328
    spectrum analysis: Šamšula 194-308
    spectrums in layered mediums: Khudzinskiy 198-313
    S-waves: Kitsunezaki 192-330
    traveltime curves: Shevchenko 199-319; Timoshin 200-328
    velocity calculation: Schulz 192-329; Veytsman 199-321
    wave front diagrams: Onasch 194-306
  refraction, blind-zone problem: Hawkins 196-330
    borehole observations: Gal'perin 202-266
    depth determination: Kaneko 199-329
    directional reception: Dobrov 197-331
    discontinuous power series: Weber 196-331
    dynamic feature: Aver'yanov 194-316
    East Germany: Martin 194-324
    engineering projects: Joglekar 194-323
    geophone grouping: Araschmid 192-331
    hidden layer problem: Green 195-319
    interpretation: Willmore 198-318
    longitudinal and converted waves: Trigubov 202-267
    marine: Neprochnov 199-328
    profile calculations: Taanila 203-315
    reflected pulses: O'Brien 198-315
    reflected refractions: Allenby 196-329

Seismic exploration—Continued
  refraction—continued
    sources of errors: Kangas 203-314
    velocity determination: Nikitin 199-317
  regulated directional reception: Meshbey 200-331; Ryabinkin 197-330, 201-335, -336; Ryaboy 194-317; Timoshin 198-317; Trigubov 197-332, -335; Voskresenskiy 197-333
  reinforced signals, recording: Voyutskiy 200-327
  river operations, U. S. S. R.: Shmelev 197-344
  rock bursts, location of: Ullmann 198-327
  salt domes, regulated directional reception: Korobov 200-333
  seismograms, mixing of traces: Picou 197-328
    statistical study: Agard 196-332
    synthetic: Kupalov-Yaropolk 200-330; Trorey 194-303
  seismograph inclination: Bondarev 202-270
  seismometer-ground system eigenvibration: Hwang 192-334
  signals, absolute amplitude: Zayonchkovskiy 194-321
    deformation of: Chauveau 196-324
    distortion in apparatus: Polshkov 199-311
    enhancement: Jackson 198-312
    grouping: Gol'tsman 201-334
  "singing," shallow water: Das Gupta 195-318
  snow-covered areas, towed boom: Krayev 199-327
  spectrum analysis: Berzon 192-328
  spectrum distortion, pulse analysis: Gratsinskiy 198-314
  steady-state curves: Dennison 201-326
  stray seismic pulses: Hagedoorn 195-315
  surface waves, types generated: Sima 202-89
    unconsolidated material: Levshin 200-323
  three-dimensional problem: Vasil'yev 199-308
  three-layer structures: Kimura 198-316
  thumping technique: Institute of Petroleum Review 198-333; Peacock 196-327; Van Reenan 192-333
  time sections, construction: Zhuk 199-324
  traveltime curves, analysis: Glogovskiy 199-325

Seismic exploration—Continued
  U. S. S. R., official instructions: Ministerstvo Geologii i Okhrany Nedr SSSR 203-317
  upper layers, inhomogeneity: Gurvich 203-316
  velocity determination: Murusidze 200-324
    averaging methods: Voronkov 199-314
    composite traveltime curves: Rabinovich 199-322
  velocity sections, basis for contour maps: John 194-307
  velocity variations: Nekrasov 197-329; Potap'yev 199-318
  wave front diagrams: Meissner 196-333
  wave velocity, sandstones: Levshin 193-328
    various applications: Petkevich 193-329
  weathered zone: Nikitin 200-322
Seismic logging, impulse shape: Yepinat'yeva 203-319
  methods, Texas: Wood 202-276
Seismic observatories, El Salvador: Boletín Sismológico del Servicio Geológico Nacional de El Salvador 201-87
  Sweden: Solov'yev 203-117
Seismic surveys, Antarctica: Cook 201-353
  Antarctica, ice thickness: Jewell 197-346; Thiel 202-292
    McMurdo Sound: Robinson 195-328
    western ice shelf: Tsukernik 203-325
  Argentina, submerged coastal plain: Ewing 198-332
  Asia-Pacific transition zone: Aver'yanov 194-350
  Atlantic Ocean: Ludwig 193-336
    LOCO drilling sites: Ewing 194-334
  Australia, Blue Hills-Logue area: West Australian Petroleum PTY Limited 202-290
    Great Artesian Basin: Milton 193-344
    Queensland: Artesian Basin Oil Company Proprietary Limited 192-342; Associated Australian Oilfields N. L. 192-343, 192-344, 202-289; Cree Oil of Canada Limited 202-291; L. H. Smart Oil Exploration Company Limited 192-341
  Black Sea: Neprochnov 194-349
  British Columbia, Salmon Glacier: Doell 197-340

eismic surveys—Continued
  Bulgaria, Burgos basin: Demitrov 198-337
  China, Taichung: Ch'iu 203-324
    Tsaidam basin: Tseng 199-349
  Czechoslovakia, Oligocene basin: Beránek 194-336
  Finland, hammer seismograph: Huhta 203-322
  Florida: Brown 192-336
  France, Gulf of Lions: Muraour 194-335; Schwaetzer 199-339
    Saint Sorlin glacier: Belin 193-337
  Germany: Dohr 193-244; Liebscher 192-339; Martin 198-335; Reich 199-340
  Greenland, glacier thickness: Sjogren 192-338
  Gulf of Mexico: Antoine 198-331; Moore 197-341
  Hungary, oil and gas: Tividar 198-336
  Indian Ocean: Neprochnov 195-216
  Japan: Kanda 199-348
    Ariake Sea: Kimura 192-340
    Matsukawa geothermal area: Hayakawa 198-344
  Massachusetts, bedrock below river channel: Sammel 193-333
    Boston Harbor: Edgerton 199-338
  New Zealand, thermal areas: Grindley 195-327
  North Sea: Closs 201-343
  Puerto Rico Trench: Ewing 193-335; Northrop 192-337
  Rumania: Constantinescu 201-345; Paicu 201-344, -346; Vasiliu 201-347
  U. S. S. R.: Donabedov 194-348; Loos 198-341
    Angara River region: Mandelbaum 195-325
    Arctic basin: Kiselev 199-346
    Azerbaijan S. S. R.: Trebukova 194-345
    Azov-Kuban basin: Chekunov 199-341
    Baltic shield: Litvinenko 194-344, 200-338
    Caspian area: Arabadzhi 201-349; Gal'perin 194-347; Petkevich 197-343
    central Asia: Butovskaya 194-351; Godin 194-338; Veytsman 194-337
    Cis-Caucasus: Meshbey 199-342
    Cis-Ural depression: Voskresenskiy 197-334
    Crimea: Gurevich 203-323
    Dnieper-Donets depression: Chirvinskaya 197-342; Demidenko 198-339, 202-288
    Emba salt domes: Tumilovich 201-350

Seismic surveys—Continued
  U. S. S. R.—continued
    Far Eastern Region: Davydova 194-342
    Fergana depression: Pak 198-342
    Kazakh S. S. R.: Kazanli 194-341
    Krivoy Rog basin: Sollogub 193-339
    Kura region: Abdullayev 195-324
    marine: Vartanov 197-345
    metamorphic rocks: Sollogub 198-338
    Minusin depression: Surkov 198-343
    Russian platform: Godin 194-338; Pomerantseva 201-348; Shneyerson 200-339; Tagay 194-352; Yegorkin 194-343
    Sakhalin Island: Shushakov 193-342; Sychev 193-342
    salt domes: Demidenko 199-343
    Siberian platform: Kiselev 199-347; Zamarayev 195-326
    South Caspian basin: Chamo 200-340
    Tagil synclinorium: Khalevin 201-352
    Tomsk region: Krylov 200-341
    Turkmen S. S. R.: Belousov 193-340; Fomenko 194-340; Godin 193-249
    Ukraine: Timofeyeva 198-340
    Urals: Khalevin 201-351
    Uzbek S. S. R.: Vol'volskiy 194-339
    Volga-Ural district: Molotova 199-345
    West Siberian Lowland: Lebedeva 193-341; Pashutina 194-346
    Zaterech Plain: Borisevich 199-344
  Wisconsin, filled valleys: Dury 193-334
  Yugoslavia: Petrovic 193-338
Seismic waves, amplitude curves, body waves: Golikova 196-128; Vanek 194-86
  azimuth anomalies, U. S. S. R.: 199-69
  core phases, transient analysis: Landisman 197-101
  core viscosity, influence of: Zharkov 199-66
  dispersion, crust-mantle structure: Dorman 194-220
    effect of relief: Obukhov 202-66
  dynamic pressures, rigid structures: Kats 197-99, 203-89
  dynamic properties, crust: Alekseyev 194-100

Seismic waves—Continued
- free oscillations of the earth: Alsop 198-75, -76; Connes 195-65; Pekeris 200-97
  - gravimeter records: Takeuchi 200-98
  - magnetic field: Winch 201-242
  - measurable parameters: Jobert 203-102
  - recorded at Trieste: Bolt 201-83
- G-waves, attenuation and dispersion: Båth 200-103
  - severe earthquakes: Bose 194-85
- longitudinal, angle of mergence: Pshennikov 198-79
- Love, dispersion: Sikharulidze 198-197
  - group and phase velocities: Gaulon 195-66
  - oceanic crust: Ghosh 196-129, 200-102
  - volcanic islands: Mal 193-94
- M-discontinuity, effect of irregularities: Jeffreys 201-81
- mantle, multiple paths: Toksöz 203-227
- modified by superficial soil, borehole observations: Shima 195-67
- P-waves, Japan: Aki 203-104
- P*, intermediate continental paths: Saha 192-95
- PKP, explanation of: Bolt 193-91
- Pn, velocity: Herrin 195-99; Stauder 198-77
- P and S phases, West Indies: Shurbet 193-92
- PS converted waves, crustal studies: Cook 194-84
- Rayleigh, amplitude perturbations: Cleary 194-83
  - Atlantic path: Bisztricszny 199-68
  - mantle: Harkrider 198-207
- S-pulse, waveform analysis: Kasahara 203-103
- short-period oscillations, spectral peaks absent: Takeuchi 203-101
- spectrum, composition: Karapetyan 203-106
  - focal depth: Keylis-Borok 197-100
  - focal mechanism: Berckhemer 194-76
  - function of local ground: Kanai 193-86
- surface, Asia: Savarenskiy 192-98
  - continental paths in Eurasia: Payo Subiza 192-97
  - Lg, and Rg in Black Sea basin: Savarenskiy 192-96

Seismic waves—Continued
- surface—continued
  - relative excitation: Brune 200-100
  - U. S. S. R.: Kukhtikova 201-82
- T-phase, New Zealand-Tasmania path: Green 195-63
  - Pacific Ocean: Johnson 202-67
- traveltime curves, crustal structure: Green 195-64
- velocity, Caribbean Sea: Barr 200-101
  - Lg: Sima 193-93
  - lower mantle: Caloi 199-201
  - U. S. S. R.: Golenetskiy 198-78
  - vicinity of focus: Weber 196-156
- wavefronts, computer program: Iyer 201-80
- waveguide, mantle: Magnitskiy 192-99
  - P_a waves: Khorosheva 194-87

Seismicity, Algeria, Hoggar Range: Grandjean 195-49
- American continents, 1500-1900: Montandon 198-63
- Antarctica: Kogan 198-66
- Bulgaria, Kaliakra region: Kirov 196-113
- El Salvador: Boletin Sismológico del Servicio Geológico Nacional de El Salvador 197-74
- Europe, 1959: Gryglewicz 193-69
  - 1960: Gryglewicz 193-68
- Finland: Miyamura 202-53
- Germany, Rhine Graben: Laubscher 198-65
- Hungary, regionalization: Gzovskiy 193-70
  - relation to structure: Bendefy 197-75
- island arc structure of Alps: Artem'yev 201-188
- Japan: Miyamura 196-112
  - crustal structure: Tamaki 196-116
  - Hokkaido: Takaya 202-59
  - Nagaoka area: Niigata L. M. O. 192-52
- measurement of: Båth 203-71; St. Amand 203-70
- Mediterranean and Near East: Karus 198-74
- microregionalization, U. S. S. R.: Kuliyev 197-79; Medvedev 197-72; Solonenko 194-73
  - weight-dropping method: Lyamzina 197-81
- ocean floor: Prentiss 203-69
- Pacific Ocean, northwest margin: Petrushevskiy 202-56
- Poland, Upper Silesia: Gibowicz 197-76, 199-62

Seismicity—Continued
  regionalization, maps of different scales: Bune 197-71
    U. S. S. R.: Vvedenskaya 197-82
  Rumania, Vrancea area: Sagalova 193-71
  Spain: Rey Pastor 192-57
    Alicante Demarcation: Martin Romero 192-56
  Taiwan: Hsu 192-80
  U. S. S. R.: Savarenskiy 192-58
    Altay Mountains: Masarskiy 194-74
    Altay-Sayan: Khovanova 192-74
    Apsheron Peninsula: Kuliyev 201-69
    Arctic: Linden 192-79
    Ashkhabad zone: Puchkov 192-69
    Baikal zone: Treskov 192-75
    Carpathians: Yevseyev 192-61
    Caucasus: Bagdasarova 192-66, 199-61; Byus 192-63; Rastvorova 195-55; Rustanovich 192-64; Tskhakaya 192-65
    central Asia: Vvedenskaya 192-70
    Crimea: Levitskaya 192-62
    Far Eastern Region: Linden 192-76
    Fergana valley and Tashkent: Butovskaya 192-72
    Garm region: Bagdasarova 192-71
    general outline: Solov'yev 192-60
    Kamchatka: Kondorskaya 196-115
    Kirgiz S. S. R.: Rozova 193-72
    Kopet Dag zone: Linden 192-67
    Kurile-Kamchatka: Goryachev 197-83, 202-55; Kondorskaya 192-77
    Makhachkala: Tabulevich 197-80
    Siberia: Rezanov 200-87
    Tien Shan: Fogel' 192-73
    Transcarpathia: Gofshteyn 197-78
    Turkmen S. S. R.: Masarskiy 192-68
    Ukraine: Yevseyev 201-68
    Urals: Levitskaya 192-78
    Yakutsk A. S. S. R.: Kochetkov 194-75
  Washington: Neumann 197-73
  world, 1958: Gryglewicz 197-67
    1960: Rothé 198-62
    distribution: Miyamura 196-112
eismograms, analog analysis: Sutton 200-104
  classification, Japan: Sakamoto 202-68
  digital records: Phinney 198-68
  digitizing, apparatus: Belotelov 202-73
  synthetic: Antsey 202-282; Baranov 202-284; Bois 202-283; Delaplanche 202-286; Dennison 202-281; d'Erceville 202-269; Geophysical Prospecting 202-287; Wuenschel 202-280
Seismographs, accelerographs, Russian: Puchkov 203-114
  accelerometers, resonant frequency: Pennington 195-69
  amplifiers, transistorized: Takeyama 202-70
  calibration, transient technique: Espinosa 193-95
  capacitively coupled: Merino y Coronado 200-105
  computer systems, Rice University: deBremaecker 203-107
  digital data logger: Miller 196-130
  electrodynamic, amplifiers: Polshkov 195-70, -71
    calibration: Teupser 196-131
  electromagnetic, equivalent constants: Tobyáš 198-82
  energy flux, tape recorder: Rykov 197-105
  experimental, Czechoslovakia: Kárník 198-84
  flat response: Gershanik 199-70
  frequency characteristics: Droste 197-104
  frequency-phase distortions: Polshkov 198-86
  galvanometer-seismometer response: Banerjee 201-85
  gyroscopic: Huang 203-108
  heating, noise: Buist 198-81
  long-period, pen-writing: Tsujiura 200-106
    response characteristics: Nuttli 197-102
  microtremometers: Tanaka 196-132
  moon, hard landing: Lehner 194-88
  motion, analytical solutions: Romberg 198-80
  multipendulum, Russian model: Karapetyan 203-113, -115
  natural frequency and damping: Kaufman 195-68
  noise levels, Bulgaria: Holub 198-83
  recording apparatus, Russian: Borisevich 203-111; Kirnos 203-112
  seismoscope, Japanese: Takahasi 203-110
  spot brightener: Riihimaa 202-72
  strong motion: Hudson 197-93
  telerecording: Riihimaa 202-71
  teleseisms, transfer function: Bogert 193-96
  tiltmeters: Inoychev 203-116
  vertical, galvanometric recording: Teupser 202-69
  See also Seismic exploration, instrumentation

- Seismology, bibliography, 1960-61: Hodgson 194-89
  - conference, U. S. S. R. in 1962: Arkhangel'skaya 201-84
  - Poland, 1958-60: Olczak 198-85
  - review: Steinert 201-70
- Seismometers, long period, inverted pendulum: Romberg 197-103
  - short period: Willmore 203-109
  - strain type: Hiersemann 194-91; Watanabe 201-86
- Silica, high-density phase: Stishov 197-217, -218
- Solar system, general description: Krogdahl 197-35
  - mass distribution: Alfven 196-31
  - origin: Alfvén 197-32, 201-23; Cameron 197-31; deJager 193-20; Fowler 198-25; Murthy 193-19; Quiring 197-29; Struve 194-23
  - stability of volatiles in: Watson 197-30
- South Africa, age, dolerites: McDougall 198-22
- South America, age determinations, carbon-14 methods: Evans 197-7
  - exploration summaries, 1961: Sass 192-145
  - tsunami, 1562-1960: Berninghausen 193-89
- South Carolina, magnetic surveys: Burdick 202-237
- South Dakota, earthquakes, 1961: Agnew 195-47
  - magnetic surveys: Meuschke 202-242
- Southern Rhodesia, paleomagnetism, Great Dyke: McElhinny 199-244
- Spain, electrical surveys, caves and fissures: Sell Cantalapiedra 192-134
  - geophysical surveys: Instituto Geologico y Minero de España 195-121
  - gravity, tie with Argentina: Baglietto 192-224
  - magnetic field, observations: Cardús 192-264, -265, 200-253
  - magnetic properties, iron deposits: Vogelsang 192-293
  - magnetic surveys: Munuera 199-269
  - paleomagnetism, Permo-Triassic: Schwarz 200-282
    - Quaternary: Glangeaud 196-299
  - seismicity: Rey Pastor 192-57
    - Alicante Demarcation: Martin Romero 192-56
- Specific gravity, rocks, U. S. S. R.: Tavrin 201-276
- Spherical harmonic analysis, new method: Fougere 197-168
- Spitsbergen, age, metamorphic rocks: Hamilton 194-19
  - magnetic field, measurements: Kowalczuk 192-271
- Stishovite, equation of state: McQueen 199-198
- Strain, photoelastic measurement: Roberts 200-347
- Strength, clays, elevated temperatures: Khuan 195-341
  - crack growth: Brace 201-354; Ghosh 199-350
  - crust of Earth: Mogi 202-296
  - ice: Jellinek 193-347
    - brine and temperature effect: Dykins 192-346; Weeks 192-353
    - brine content: Assur 192-351
    - Greenland: Brown 192-348
    - methods of measurement: Kingery 192-349
    - time-dependent deformation: Hobbs 192-350; Kingery 192-345, -347
    - vertical variation in sheet: Weeks 201-358
    - wedge theory to predict cracks: Nevel 192-352
  - physical theory: Idenbom 195-340
  - rocks, boreholes: Paslay 198-348
    - coal mines: Radmanovich 196-342
    - dam foundations: Serafim 198-350
    - disking of cores: Jaeger 198-346
    - effect of mechanical properties: Kuznetsova 200-345
    - general discussion: Iida 202-294
    - high pressure: Matsushima 202-295
    - mining operations: Liu 192-355
    - rockbursts: Taylor 199-352
    - U. S. S. R.: Belikov 199-81
  - rock bursts, acoustical observations: Vinogradov 202-297
    - synthetic: Morrisson 200-349
  - rock failure, dynamic loading: Burdine 198-347
  - rock mechanics, mine development: Emery 198-349
  - rock pressure, effect on porosity: Marmorshteyn 199-354
    - mines: Isaacson 199-351
  - rock specimens, compared with crust: Mogi 193-346
  - salt, mine openings: Mamedov 198-351
  - sea ice: Brown 201-114; Graystone 202-301; Kingery 202-302; Langleben 193-348; Peyton 202-300; Pounder 202-298
  - stress history, thermoluminescence of rocks at Meteor Crater: Roach 193-351

trength—Continued
  underground openings, microseismic prediction: Kobliska 197-348
tress, underground openings: Adler 196-341
ice, thermoluminescence techniques: Zeller 197-347
tress waves, anelastic mediums: Kolsky 197-113
ubmarine geology, Antarctic Ocean: Zhivago 202-310
  Arctic, Canada: Collin 197-351; Pelletier 197-350
  Arctic Ocean: Ostenso 195-342
    crustal structure: Ostenso 201-227
    physiography: Ostenso 203-329
  Atlantic Ocean: Bezrukov 193-354
    Black Mud Canyon (France): Francis 198-354
    south of Great Britain: Stride 202-306
    Straits of Florida: Hurley 197-349
    submerged volcanoes: Sea Frontiers 196-349
  Caribbean Sea, Gulf of Paria: Andel 203-330
  Chukchi Sea, Barrow Canyon: Lepley 193-355
  earthquakes, recorded on ocean floor: Prentiss 203-69
  geophysics of ocean basins: Erimesco 196-347
  Great Meteor seamount: Pratt 200-355
  Gulf of Thailand: Emery 202-308
  Gulf of Mexico: Moore 197-341
  guyots, origin: Nayudu 202-305
  Indian Ocean: Bezrukov 193-354
    fault scarp: Matthews 202-307
  instrumentation: Leenhardt 200-357; Worzel 198-357
  Japan, Enshu Sea: Sato 196-351
    Kushiro submarine canyon: Sato 196-352
    Tokyo submarine canyon: Chujo 198-355
  Mediterranean Sea: Bezrukov 193-354; Centre National de la Recherche Scientifique 193-352; Kovylin 193-353
  Nansen Trough: Heintz 203-328
  oceanography, review: Cromie 200-352
  Pacific Ocean, andesite line: Engel 202-309; Gaskell 195-343
    continental shelf off California: Moore 203-327

Submarine geology—Continued
  Pacific Ocean—continued
    Peru-Chile Trench: Fisher 198-353
  Project Loco: Kasanof 196-350
  research, Canada: Cameron 200-356
  sea floors, morphology: Panov 200-353
    structure: Bullard 192-357
  sea gullies, origin: Buffington 200-354
  sonic reflection techniques: Bowers 198-356
  textbook: Williams 201-359
  United States, continental margins: Jordan 196-348
Sumatra, age, granites: Katili 202-24
Surinam, magnetic surveys: Agocs 200-295
Swaziland, age, granites: Allsopp 196-13
Sweden, age, galena: Wickman 201-235
  age, radiocarbon dates: Östlund 203-32
  crust, structure: Båth 192-241
  earth currents, observation: Rösler 196-103
  earthquakes, 1891-1950: Båth 194-70
  geophysical exploration: Artamonov 192-151
  geotectonics, recent uplift: Lundqvist 198-156
  isotopes, lead: Wickman 201-235
  seismic observatories: Solov'yev 203-117
Switzerland, age, granite: Grünenfelder 203-13
  age, radiocarbon dates: Gfeller 203-38
  gravity surveys: Gonet 203-207
  radioactivity surveys: Rybach 198-292, 199-278
Syria, electrical surveys, water: Yastrebov 198-111
Taiwan, earthquakes, distribution of focuses: Lee 201-72
  electrical surveys: Mineral Survey Team of the Ministry of Economic Affairs 194-146, -147, 148, -149, -150, -151, -152
Tanganyika, age, basalt: Leakey 201-11
  age, volcanic rocks: Hay 199-9
  earthquakes, 1959: Haldemann 192-49
  geophysical surveys: Carter 192-147; Makowiecki 203-159
  radioactivity, carbonate lave: Poole 202-256

Tanganyika—Continued
  volcanic activity, Oldoinyo Lengai: Dawson 202-335
Tasmania, heat flow: Jaeger 199-191
  meteorites, impactites: Taylor 193-51
  paleomagnetism, Jurassic: Stott 198-268
    Mesozoic: Irving 198-267
Taylor series, applied to interpolation and integration: Butkevich 195-128
Tchad Republic, gravity surveys: Louis 196-239
Tektites, age, Australites: Baker 199-39
  age, Georgia: Clarke 196-57
    Germany: Gentner 197-21
    Moldavites: Gentner 193-50
  australites, alkali elements: Taylor 196-56
    two meltings: Baker 198-33
  composition, compared with rocks and meteorites: Lowman 194-48; Taylor 194-49
    La, Eu, and Dy: Chase 195-23
  cosmic-ray exposure history: Viste 192-31
  differential volatilization: Greenland 196-55, 199-41
  ferric-ferrous iron ratio: Thorpe 199-42
  Georgia, description: King 199-40
  magnetic susceptibility: Thorpe 199-42
  nickel content, compared with impactites and obsidian: Ehmann 194-47
  orbits of entry, numerical derivation: O'Keefe 192-34
  origin: Straik 199-43; Urey 192-33
    cometary: Lyttleton 201-44; Urey 196-58
    experiments with sandstone: Hawkins 196-54
    extraterrestrial: O'Keefe 198-32
    indochinites: Barnes 192-32
    lead isotope criteria: Starik 193-48, 200-49
    lunar igneous activity: Lowman 203-53
    moon: Chapman 202-37; O'Keefe 193-47
    oxygen isotope studies: Taylor 195-24
    terrestrial splash: Taylor 194-50
    possible occurrence in Canada: Martin 195-25
    Ries Kessel: Vand 201-45
    rare-earth elements, compared with rocks: Haskin 197-53
    thorium and uranium contents: Cherry 193-49
Tektites—Continued
  strain in: Koenigswald 203-52
Tennessee, radioactivity surveys, Oak Ridge area: Bates 195-310
Texas, age, Precambrian rocks: Wasserburg 194-8
  electrical surveys, water: McFarland 192-132
  gravity surveys: Jones 192-227, 199-172; Watkins 193-221
  magnetic surveys: Andreasen 202-241; Brod 199-268; Watkins 193-221
  meteorite craters, Odessa: Evans 194-53
  radioactivity surveys: Guillou 196-316; MacKallor 197-315
Thailand, age, granites: Aldrich 197-17
  magnetic surveys, Bangkok-Singapore: Agocs 192-309
Thermal activity, Iceland, heat sources: Bődvarsson 195-207
Thermal conductivity, clays, method and apparatus: Mongelli 196-249
  ice: Ratcliffe 192-196
  rocks: Kobranova 203-164
    Italy: Bossolasco 199-186
    oil reservoirs: Adivarahan 193-235
    porous: Kunii 200-230; Sugawara 197-214
    under pressure: Dvořák 192-238
Thermal springs, Bulgaria: Petrov 201-222
  Japan: Sato 199-358
    Arima area: Okamoto 202-169
    Gojōjiki area: Nakamura 193-363
    Hokkaido: Saito 200-359
Thermoluminescence, marble, influence of deformation: d'Albissin 195-212
Thermometers, ice: Philberth 195-183
  vertical gradient in small boreholes: Collins 199-192
Thermotelluric currents, generation by explosions: Tuman 200-124
Trinidad, magnetic surveys: Agocs 200-295
Tristan da Cunha, volcanic activity: Holdgate 193-360
Tsunami, coastline effect: Momoi 200-94
  directivity, aftershock area: Hatori 203-100
    bottom irregularities: Momoi 203-96
  dissipation: Munk 194-80

Tsunami—Continued
- formulas for waves, displaced bottom: Momoi 195-76
  - instantaneously elevated elliptic wave origin: Momoi 195-75
  - vibrating bottom: Momoi 195-72, 195-73, -74
- generation, circular source area: Momoi 196-126
  - elliptic source area: Momoi 196-127, 203-95; Takahasi 200-96
- Greece: Ambraseys 203-94; Galanopoulos 192-91
- Hawaii: Hatori 203-99
- Japan, 1961: Takahasi 195-77
  - Chilean earthquake of 1960: Momoi 203-97, -98; Nakano 194-82
  - historical review (A. D. 1684-1961): Hakoda 193-90
- Kurile Islands, 1958: Samuseva 95-79
- Mediterranean Sea: Ambraseys 193-88
- Okinawa, Chilean earthquake of 1960 Taneda 194-81
- South America, 1562-1960: Bernighausen 193-89
- square wave origin: Momoi 200-95
- U. S. S. R., Kamchatka coast: Fedotov 196-125

Turkey, age, pitchblende: Durand 194-17

U

Union of South Africa, age, igneous rocks: Clifford 193-13
- magnetic surveys, Bushveld complex: Coertze 200-296
- paleomagnetism, Triassic-Jurassic: Zijl 195-289

U. S. S. R., age, basic and ultrabasic rocks: Gerling 195-13
- age, general listing: Knyazev 197-24
  - granites: Bondarenko 200-31, 201-18; Dagelayskiy 200-35, 200-38; Fishman 196-24; Komlev 195-15; Kuzhel'nyy 194-20; Maslenikov 200-37, -40, -41; Tokarev 202-20
  - igneous rocks: Artemov 198-18; Firsov 200-26; Krasnobayev 195-14; Maslenikov 200-28; Nenashev 192-11; Priyatkina 200-34; Shurkin 202-18; Stupnikova 192-10
  - igneous and metamorphic rocks: Dagelayskiy 200-32; Maslenikov 200-29, -33
  - metamorphic rocks: Bondarenko 200-30; Firsov 197-26; Proshchenko 194-21

U. S. S. R.—Continued
- age—continued
  - migmatites: Shurkin 202-17
  - paleolithic culture: Ivanova 197-23
  - pegmatites: Maslenikov 200-39
  - pollen: Neyshtadt 196-23
  - Precambrian rocks: Glebova-Kul'bakh 201-19; Kratts 203-17; Lobach-Zhuchenko 200-43; Pinayeva 200-42; Polkanov 200-25
  - radiocarbon dates: Cherdyntsev 200-27; Serebryannyy 202-22; Starik 199-21; Vinogradov 192-3
  - schists: Semenenko 196-25
  - sedimentary rocks, Lena basin: Dubar' 196-26
  - shale: Permyakov 201-20
  - syenite: Bondarenko 200-36; Zhidkov 199-22
  - veins: Shurkin 202-19
  - zircon: Zhirova 196-22
- crust, structure and thickness: Ali-Zade 200-235; Antonenko 200-219; Arkhangel'skaya 192-242; Balavadze 198-199; Belyayevskiy 202-178; Borisov 196-260; Bulmasov 193-250; Butovskaya 194-351; Davydova 194-342; Donabedov 194-348; Fomenko 194-340; Gal'perin 194-347, 198-203; Godin 193-248, -249, 198-200; Golenetskiy 198-201; Kazani 194-341; Khalevin 199-194, -195; Kosminskaya 199-196; Krestnikov 196-264; Litvinenko 194-344; Panasenko 195-214; Pashutina 194-346; Rezanov 195-215; Savarenskiy 199-65; Shaposhnikov 193-247; Shcherba 196-262; Shechkov 193-246; Tagay 194-352; Tatevosyan 199-193; Trebukova 194-345; Ulomov 196-263; Yegorkin 194-343
- density, rocks: Krinari 195-199
- earth currents, observations: Dubrovskiy 199-53
- earth current surveys, West Siberian Lowland: Kuznetsov 200-80
- earthquakes, 1957: Solonenko 195-52
  - 1958: Fedotov 194-71; Tokarev 197-69; Treskov 198-59
  - 1959: Misharina 195-50; Pshennikov 195-51; Vvedenskaya 197-68
  - 1961: Yeres'ko 202-54

- U. S. S. R. —Continued
  - earthquakes—continued
    - aftershocks: Pshennikov 194-79
    - energy: Aronovich 202-60; Fedotov 203-73
    - focal mechanism: Aver'yanova 196-119
    - ground vibrations: Puchkov 197-96
    - mechanism: Shirokova 195-61
    - prediction: Savarenskiy 199-65
    - review: Savarenskiy 192-58, 197-77
    - Turkmen-Khorasan Mountains: Rezanov 195-56
  - earth tides, observations: Dobrokhotov 201-92; Latynina 199-72; Ostrovskiy 195-84, 201-94, -95, 201-96; Pariyskiy 195-81, 201-93
  - electrical logging, gold deposits: Leman 197-152
    - ore deposits: Onin 198-124
    - review: Komarov 197-153
    - self-potential: Mikaelyan 198-122
  - electrical logging surveys: Belousova 202-101; Sigal 198-117; Us 199-110
    - Aleksandriyskaya research drill hole: Alferov 194-164
    - Azov-Kuban basin: Izhotova 199-105
    - Berezovo research drill hole: Boyarskikh 194-165
    - Shirokaya Balka: Kravchuk: 194-163
    - Tuymazy field: Anpilogov 196-191
    - Volograd: Rakhmanova 194-161
    - West Kuban basin: Bedcher 194-162
    - West Takub field: Gunenko 194-160
    - Zaysan research drill hole: Vasilenko 196-192
  - electrical surveys: Rodionov 201-134
    - Caspian Sea: Sarkisov 199-101
    - caves: Ogil'vi 194-142
    - copper-molybdenum: Auzin 197-142
    - gold lodes: Rogachev 194-143
    - ground water: Ogil'vi 196-188
    - Karelia: Artamonov 194-141
    - Kazakh S. S. R. : Al'mukhanbetov 197-148
    - landslide features: Trzhtsinskiy 194-144
    - permafrost: Anishchenko 195-112
    - potassium salts: Donchenko 199-100
    - Russian platform: Kalenov 201-137
    - Sakhalin: Kirichek 200-130

- U. S. S. R. —Continued
  - electrical surveys—continued
    - sulfides and magnetite: Gurevich 201-136
    - Techensk iron deposit: Astrakhantsev 201-135
  - explosion seismology: Yershov 192-117
  - geodesy, plumbline deflections: Pellinen 196-209
  - geophysical exploration, basement: Klubov 197-161
    - oil and gas: Borisov 196-199, 197-160
  - geophysical surveys: Fotiadi 198-139; Shcherbakov 192-152
    - Angara River region: Savinskiy 195-125
    - Azerbaijan S. S. R. : Baba-Zade 200-160
    - Bashkir A. S. S. R. : Ovanesov 200-162
    - bauxite: Babayants 195-124; Sukharina 200-165
    - Caspian Sea: Kornev 199-117; Yurchenko 197-163
    - Caspian-Kuban area: Dzhafarov 193-160
    - Central Asia: Dikenshteyn 200-157
    - Cis-Ural downwarp: Khat'yanov 202-106
    - copper deposits: Igoshin 202-108; Nikolayevskiy 202-107; Vinogradov 200-151
    - Crimea: Lebedev 201-153
    - Crimea and Kuban: Sollogub 193-158
    - Dnieper-Donets Basin: Baranov 200-161
    - ground water in mineral deposits: Ogil'vi 195-123
    - iron deposits: Kovalevich 200-154
    - Krasnodar Territory: Korotkov 200-158
    - Krivoy Rog basin: Muromtseva 201-152
    - Kursk Magnetic Anomaly: Chaykin 200-155
    - rare metal intrusives: Shcherba 201-156
    - Romashkino field: Begishev 200-163
    - Rudnyy Altay: Ryss 196-197
    - Russian platform: Podoba 201-154; Yurkova 201-155
    - Russian platform and central Asia: Shiryayev 194-173
    - Sakhalin Island: Milashin 198-140

U. S. S. R. —Continued
geophysical surveys—continued
Sea of Azov area: Lebedev 193-159
Siberia: Fotiadi 197-164; Rozenberg 199-120
Trans-Urals: Khalevin 201-157
Ural-Volga area: Klubov 196-196
Ust-Yenisei basin: Kislev 199-119
Ustyurt Plateau: Ishutin 199-118
Vyatskiy swell: Ivanov 197-162
West Siberian Lowland: Rostovtsev 200-159
geotectonics, orogenic cycle: Azizbekov 202-124
recent deformation: Babak 195-155; Bondarchuk 195-161; Budanov 197-187; Bylinskiy 197-186; Chemekov 195-173; Devyatkin 202-140; Doskach 195-167; Dumitrashko 195-174; Gudelis 194-191; Gzovskiy 194-195, 195-170; Kiryushina 195-165; Kovalevskiy 195-158; Kropotkin 195-177; Lesis 195-160; Lungergausen 195-166, -171; Meshcheryakov 194-193, 195-162; Nikolayev 195-164, -169; Pronicheva 195-163; Rodzyanko 195-175; Sinyagina 194-194; Springis 195-157, -172; Svarichevskaya 195-168; Zhelin 194-192
geothermal gradient, Azerbaijan oil fields: Yakubov 196-251
Bukharo-Khiva: Kortsenshteyn 196-252
Caucasus: Sukhanarev 197-215; Sukharev 199-187
Donets Basin: Duganov 193-237
Kotselvaara: Cheremenskiy 202-165
Kuban-Black Sea oil-gas area: Taranukha 193-236
Minusin depression: Gavlina 199-189
West Siberian artesian basin: Mavritskiy 199-188
West Siberian Lowland: Koshlyak 200-229
glaciers, Fedchenko Glacier: Akad. Nauk Uzbek. SSR 202-146
gravity, absolute at Leningrad: Yanovskiy 192-226
pendulum apparatus: Kheyfets 196-235, 196-236
gravity surveys, Amur-Zeya depression: Volodarskiy 198-187
Angara-Ilim iron deposits: Pis'mennyy 195-202
Apsheron Peninsula: Tsimel'zon 196-241

U. S. S. R. —Continued
gravity surveys—continued
Azov-Kuban basin: Chekunov 199-341
Baltic area: Faytel'son 201-213
Bukhara-Khiva: Vol'vovskiy 200-218
Central Russian depression: Nikitina 198-185
Crimea: Lebedev 203-211
diamond pipes: Romanov 199-180
Donets Basin: Malovitskiy 201-214
Far Eastern Region: Shaposhnikov 195-200
Kara Bogas Gol: Laskina 200-217
Kazakh S. S. R.: Popov 197-211
Krivog Rog: Panasenko 203-212
Kursk magnetic anomaly: Pavlovskiy 198-281
mine workings: Mudretsova 193-197
Moscow syneclise: Fokshanskiy 198-280
Mount Elbrus anomaly: Avdulov 194-216
Pechora coal basin: Poletayev 198-186
permafrost areas: Bulmasov 200-221
Sakhalin Island: Sychev 193-342
Siberia: Volodarskiy 198-188
Siberian platform: Fogler 195-201; Kuteynikov 197-212
Tatar A. S. S. R.: Boronin 195-198; Krinari 195-199; Salikhov 193-231
ties to Leningrad: Dobrokhotov 201-212
Turgay depression: Bugaylo 196-242
Urals: Malakhov 197-210
Ust-Yenisei basin: Martynova 199-181
West Siberian Lowland: Shablinskaya 200-220
magnetic field, annual variations: Adam 200-254, -255
observations: Vinogradov 194-248
magnetic properties, alkalic rocks: Mikhaylova 196-286
basalts: Metallova 197-267
dolerites: Faynberg 198-254
granites: Mikhaylova 200-276
ilmenite in kimberlite: Frantsesson 193-290
quartzites: Bezuglaya 198-252; Krutivskaya 193-293
rocks: Tavrin 201-276; Turitsyn 195-282

U. S. S. R. —Continued
magnetic properties—continued
sedimentary rocks: Bosov 201-277; Martirosova 199-239
traps: Faynberg 201-278
magnetic surveys, Alakul' basin: Voytovich 197-298
Angara-Ilin region: Davydov 195-303
Baltic area: Faytel'son 201-213
composite map: Vasil'yeva 199-270
corundum: Pelyushenko 198-283
crustal thickness: Simonenko 193-302
Donets Basin: Malovitskiy 201-214
iron ores: Rudnitskiy 195-302; Usenko 200-298
Kamchatka: Shteynberg 193-306
Karelia: Artamonov 194-141
Kazakh S. S. R. : Auzin 194-289
kimberlite pipes: Savrasov 193-305
Kursk magnetic anomaly: Pavlovskiy 198-281
Leninogorsk district: Malygin 193-304
Moscow syneclise: Fokshanskiy 198-280
Siberia: Gusev 199-241
Siberian platform: Litinskiy 199-271
Tatar A. S. S. R. : Krinari 194-278; Salikhov 193-231
Turgay depression: Bugaylo 196-242
Ukrainian S. S. R. : Gerasimov 198-282; Lebedev 193-303
Ust-Yenisei region: Lastochkina 199-273
magnetic susceptibility surveys: Afanas'yev 197-272
magnetotelluric current exploration: Vladimirov 198-46
magnetotelluric current surveys, Georgian, S. S. R. : Chernyavskiy 200-78
Turkmen S. S. R. : Anishchenko 199-50
Ust-Yenisei basin: Gvizd' 199-58
West Siberian Lowland: Berdichevskiy 199-57
mantle, structure, Kurile Islands: Fedotov 203-231
meteorites, Dzhugdzhur: Yarmolyuk 195-22
Tungus: Fesenkov 193-22, 201-30; Florenskiy 193-23; Ivanov 201-32; Plekhanov 201-31; P'yavchenko 193-24
microseisms, high frequency: Antonenko 197-304

U. S. S. R. —Continued
paleomagnetism, Carboniferous: Vlasov 198-265
Devonian: Lin'kova 201-283; Rusinov 198-264
general discussion: Yanovskiy 195-290
Paleozoic: Popova 202-227
Pliocene-Pleistocene: Pospelova 202-229
Precambrian: Vlasov 202-228
research: Tomkeieff 198-262
physical properties, rocks of Siberian platform: Beluzin 195-137
radioactivity, clays: Serikov 202-257
granites: Amshinskiy 197-308
rocks: Ivanov 196-309
radioactivity logging, coal seams: Dem'yanovskaya 195-313
mercury deposits: Ivanov 200-318
permafrost: Ostryy 198-311
surveys: Belousova 202-161; Us 199-110
radioactivity surveys, Azerbaijan S. S. R.: Alekseyev 199-286
Bukhara-Kiva gas fields: Semenov 199-285
seismic surveys: Donabedov 194-348; Gal'perin 194-347; Loos 198-341; Trebukova 194-345
Angara River region: Mandel'baum 195-325
Arctic basin: Kiselev 199-346
Azov-Kuban basin: Chekunov 199-341
Baltic shield: Litvinenko 194-344, 200-338
Caspian area: Arabadzhi 201-349
central Asia: Butovskaya 194-351; Veytsman 194-337
Cis-Carpathian downwarp: Petkevich 197-343
Cis-Caucasus: Meshbey 199-342
Cis-Ural depression: Voskresenskiy 197-334
Crimea: Gurevich 203-323
Dnieper-Donets depression: Chirvinskaya 197-342; Demidenko 198-339, 202-288
Emba salt domes: Tumilovich 201-350
Far Eastern Region: Davydova 194-342
Fergana depression: Pak 198-342
Kazakh S. S. R. : Kazanli 194-341
Krivoy Rog basin: Sollogub 193-339
Kura region: Abdullayev 195-324

U. S. S. R. — Continued
  seismic surveys—continued
    marine: Vartanov 197-345
    metamorphic rocks: Sollogub 198-338
    Minusin depression: Surkov 198-343
    Russian platform: Godin 194-338; Pomerantseva 201-348; Shneyerson 200-339; Tagay 194-352; Yegorkin 194-343
    Sakhalin Island: Shuchakov 193-343; Sychev 193-342
    salt domes: Demidenko 199-343
    Siberian platform: Kiselev 199-347: Zamarayev 195-326
    South Caspian basin: Chamo 200-340
    Tagil synclinorium: Khalevin 201-352
    Tomsk Region: Krylov 200-341
    Turkmen S. S. R. : Belousov 193-340; Godin 193-249; Fomenko 194-340
    Ukrainian S. S. R. : Timofeyeva 198-340
    Uzbek S. S. R. : Vol'vovskiy 194-339
    Volga-Ural district: Molotova 199-345
    West Siberia: Pashutina 194-346
    West Siberian Lowland: Lebedeva 193-341
  seismic waves, azimuth anomalies: Golenetskiy 199-69
    surface: Kukhtikova 201-82
    velocities: Golenetskiy 198-78
    Zaterech Plain: Borisevich 199-344
  seismicity: Savarenskiy 192-58
    Altai Mountains: Masarskiy 194-74
    Altai-Sayan: Khovanova 192-74
    Apsheron Peninsula: Kuliyev 201-69
    Arctic: Linden 192-79
    Ashkhabad zone: Puchkov 192-69
    Baikal zone: Treskov 192-75
    Carpathians: Yevseyev 192-61
    Caucasus: Bagdasarova 192-66, 199-61; Byus 192-63; Rastvorova 195-55; Rustanovich 192-64; Tskhakaya 192-65
    central Asia: Vvedenskaya 192-70
    Crimea: Levitskaya 192-62
    Far Eastern Region: Linden 192-76
    Fergana valley and Tashkent: Butovskaya 192-72
    Garm region: Bagdasarova 192-71
    general outline: Solov'yev 192-60
    Kamchatka: Kondorskaya 196-115

U. S. S. R. —Continued
  seismicity—continued
    Kirgiz S. S. R. : Rozova 193-72
    Kopet Dag zone: Linden 192-67
    Kurile-Kamchatka: Goryachev 197-83, 202-55; Kondorskaya 192-77
    Makhachkala: Tabulevich 197-80
    regionalization: Kuliyev 197-79; Medvedev 197-72; Vvedenskaya 197-82
    Siberia: Rezanov 200-87
    Tien Shan: Fogel' 192-73
    Transcarpathia: Gofshteyn 197-78
    Turkmen S. S. R. : Masarskiy 192-68
    Ukrainian S. S. R. : Yevseyev 201-68
    Urals: Levitskaya 192-78
    Yakutsk A. S. S. R. : Kochetkov 194-75
  tsunami, Kamchatka coast: Fedotov 196-125
    Kurile Islands in 1958: Samuseva 195-79
  Upper Mantle Project: Rezanov 202-185; Zalesskiy 202-186
  volcanic activity, evolution of composition: Vlodavets 202-325
    Kamchatka, Bezymyannyy: Bogoyavlenskaya 202-327; Gorshkov 195-353; Gushenko 197-353
      main stages: Svyatlovskiy 202-202-322
      valley of Geysers: Gorshkov 197-354
    Koryak paleovolcanism: Yegiazarov 202-352
    Kurile Islands: Gorshkov 195-352
    Kurile-Kamchatka Arc: Gorshkov 202-342; Vlodavets 203-341
    Mount Elbrus: Masurenkov 192-359
    Quaternary Anyuy Volcano: Ustiyev 203-340
  volcanology, kimberlite pipes: Rabkin 202-351
United States, age, Precambrian rocks: Tilton 198-5
  crust, structure: Aki 196-256; Smith 195-98
  earthquakes, 19th century: MacCarthy 198-55
    1959: Eppley 200-83
    1960: Talley 198-54
Uruguay, paleomagnetism, basalt: Creer 195-288
Utah, age, volcanic rocks: Bassett 198-7
  geophysical surveys: Black 197-156; Case 197-205

Utah—Continued
  gravity surveys: Gates 193-223
  gravity and magnetic surveys: Behrendt 196-237; Joesting Mabey 197-204

V

Venus, electrical properties of surface: Muhleman 201-58
  magnetic field: Smith 198-41
  surface temperatures: Barrett 203-61
Vermont, magnetic surveys: Andreasen 203-281; Meuschke 203-279; Popenoe 203-280
Viet Nam, age, marine terraces: Saurin 199-24
Virginia, magnetic surveys: Blanchett 197-285, -286, 199-266; Johnson 202-236; Le Van 199-267
Volcanic activity, 1957-59: Hantke 202-334
  1961: Volcanological Society of Japan 193-358
  acoustic qualities: Richards 196-353
  Alaska, Katmai: Bordet 203-336
  Aleutian Arc, magma types: Coast 202-315
  Asia, Kamchatka to Indonesia: Taneda 203-354
  Azores, Capelinhos: Mendonça 202-328, -329
  Bali, Gunung Agung: Warf 201-360
  caldera formation: Markhinin 202-346
  Chile: Casertano 197-352; Tazieff 202-319
  classification of eruptions: Hédervári 193-356
  crustal deformation: Rivière 200-189
  depth of origin: Hayakawa 196-354
  directed blasts: Gorshkov 203-331
  energy balance, Bezymyanny: Gorshkov 195-351
  Ethiopia, paleovolcanism: Mohr 202-336
  gases: Iwasaki 203-345; White 202-311
  geotectonic environment: Brouwer 202-314
  glowing clouds: Gorshkov 202-324, -345
  Greece, Santorin: Abbruzzese 202-340; Galanopoulos 193-364; Georgalas 202-331
  Hawaii: Eaton 202-313; Macdonald 195-345; Moore 192-358

Volcanic activity—Continued
  Hawaii—continued
    Kilauea Iki: Macdonald 202-330; Ruhle 195-346
    magnetic surveys: Decker 203-289
    physical properties of magma: Macdonald 203-337
    submarine pillow lavas: Moore 202-312
  Iceland, Askja: Thorarinsson 193-361
  Indonesia, danger classification: Hadikoesoemo 203-356
    temperature variations before eruption: Neumann van Padang 203-355
  Italy, Etna: Chaigneau 196-355
    Stromboli: Peterschmitt 193-362
  Japan, 1957-59: Minakami 202-318
    Aso and Sakurazima: Kubotera 203-351
    energy of: Sugimura 203-344
    explosive types: Derruau 196-356
    gases: Iwasaki 192-361
    geomagnetic variations: Yukutake 195-354
    geysers: Iwasaki 192-360
    lava composition: 202-358, -359
    magnetic changes at Mihara: Rikitake 203-350
    Nasusan Volcano: Tanaka 202-357
    prediction: Kayama 203-346; Yasui 202-355
    pyroclastic flows: Aramaki 203-348; Murai 203-349
    Showa-Shinzan: Mizutani 203-353
    tectonic zones: Ishikawa 195-355
    Tokachi-dake: Katsui 202-356; Murai 203-352
    types of eruptions: Tsuya 203-342
    Yake-dake: Murai 199-357
    zones: Yagi 203-343
  juvenile water, explosions: Markhinin 202-326
  mechanism, degassing: Rittmann 202-332
  Mexico, Colima group: Mooser 195-349
    Michoacan: Blasquez L. 195-347
    Tres Virgenes in Baja California: Mooser 195-348
  Mount Rainier: Hopson 193-359
  New Guinea, Manam: Taylor 203-337

Volcanic activity—Continued
  New Hebrides, Matthew Island: Remy 203-338
    seismicity: Blot 203-339
  New Zealand, dormant zones: Healy 203-361
    Taupo zone: Healy 202-317
    Tongariro group: Gregg 195-356
  Pacific Ocean, South Sandwich Islands area: Gass 203-358
  periodicity: Tamrazyan 202-353
  Peru: Bullard 202-337
  prediction: Gèze 203-360; Vlodavets 202-354
    composition and amount of gases: Noguchi 203-347
    stress measurement in place: Tazieff 195-344
  pyroclastic material: Vlodavets 202-344
  St. Vincent: Wager 202-320
  Stromboli, 1959: Cavallaro 202-341
  submarine eruptions, factors governing: McBirney 203-332
  Tanganyika, Oldoinyo Lengai: Dawson 202-335
  tiltmeter observation: Tommasi 202-339
  Tristan da Cunha: Holdgate 193-360
  type of eruption, lava composition: Vlodavets 203-341
  U. S. S. R., Bezymyanny: Bogoyavlenskaya 202-327; Gorshkov 195-351, -353; Gushenko 197-353
    Kamchatka: Gorshkov 197-354; Vlodavets 202-325; Svyatlovskiy 202-322
    Koryak paleovolcanism: Yegiazarov 202-352
    Kurile Islands: Gorshkov 195-352
    Kurile-Kamchatka Arc: Gorshkov 202-342; Vlodavets 203-341
    Mount Elbrus: Masurenkov 192-359
    Quaternary Anyuy Volcano: Ustiyev 203-340
olcanic earthquakes, Hawaii, 1959: Eaton 203-67
  Japan, Mount Aso: Kikuchi 196-357
  mechanism: Mogi 203-359
olcanism, basaltic magma, water in: Khitarov 202-321
  bodies of the solar system: Vsekhsvyatskiy 194-25, 202-36
  calderas, classification: McCall 195-350
  gravity anomalies, cause: Vening Meinesz 200-358
  hydrothermal processes: Ivanov 202-348; Naboko 202-323, -347
  ignimbrites: Bemmelen 202-338
Volcanism—Continued
  magma, ascent: Rittmann 202-333; Shimazu 203-334
    formation by stress release: Uffen 203-333
    pockets in mantle: Shimozuru 203-232
    relation of types to continents: Galeyeva 202-349
  research reviewed: Rittmann 193-357
  rock types, frequency distribution: Kuno 202-316
    viscosity: Murase 202-360
  thermal regimen: Aslanyan 202-343
  trap formation, U. S. S. R.: Bakar 202-350
  U. S. S. R., kimberlite pipes: Rabkin 202-351
    relation to seismicity in Kurile-Kamchatka area: Goryachev 197-83

W

Washington, seismicity: Neumann 197-73
  volcanic activity, Mount Rainier: Hopson 193-359
Waves, transit time, fluctuations: Brown 193-163
West Africa, age, general listing: Bonhomme 194-13
West Indies, seismic waves, P and S phases: Shurbet 193-92
Wisconsin, age, radiocarbon dates: Broecker 202-7
  magnetic surveys: Henderson 202-239
Wisconsin, seismic surveys, filled valleys: Dury 193-334
Wyoming, age, lacustrine deposits: Love 193-180
  age, Precambrian, rocks: Bassett 198-8
  geotectonics, recent movement: Love 193-180
  magnetic surveys: Dempsey 202-243

X

Xenon, atmospheric, solar origin: Cameron 197-52

Y

Yugoslavia, age, granite: Cervenjak 199-19; Deleon 195-12
  crust, structure: Roksandić 193-230
  geophysical exploration: Prosen 198-137

Yugoslavia—Continued
  geophysical surveys: Damnjanović 194-171; Mužijevíc 193-157; Šumi 192-149
  gravity surveys: Roksandić 193-230
  seismic surveys: Petrovic 193-338
Yukon Territory, magnetic surveys: Canada Geological Survey 203-298

ERRATA IN ABSTRACTS

192-22, p. 7 (January)
First line should read
"Mason, Brian, and Wiik, H. B."
192-112, p. 29 (January)
First line should read
"Kats, S. A."
192-255, p. 62 (January)
First line should read
"Sonett, C. P., Smith, E[ward] J., and Sims, A. R."
193-359, p. 180 (February)
First line should read
"Hopson, Clifford A., Waters, Aaron C., Bender, V. R., and Rubin, Meyer."
194-285, p. 261 (March)
First line should read
"Meyer, V. A., and Kuvaldin, V. A."
195-237, p. 345 (April)
First line should read
"Nodia, M. S. [M. Z.]"
198-165, p. 612 (July)
In title on line 2, read
"no. 67" for "no. 60."
199-204, p. 710 (August)
First line should read
"Hafner, St[efan], Hartmann, P., and Laves, F."
202-75, p. 946 (November)
Line 7 should read
"model 2 gives the best agreement with the values of ρ, λ, and μ determined"
202-76, p. 946 (November)
Line 1 should read
"Values for the elastic parameters μ and λ in the outer core are investigated"